January 1979

Smithsonian

Doubtful method to 'save' Grévy's zebra (p. 34); here, a capture is made

"They have incredibly beautiful golf holes in Bermuda. The sea and sky and pastel houses ...you lose yourself in the beauty."

George and Sally Newi
talk about their fourth visit to Bermuda.

"To have four or five outstanding golf courses so close to where you're staying is really terrific."

"I scored very well here, even on the most challenging courses. I think part of it is the totally relaxing quality of the island."

"The people here are so friendly and polite. To each other, and to visitors."

Bermuda

Unspoiled. Unhurried. Uncommon.

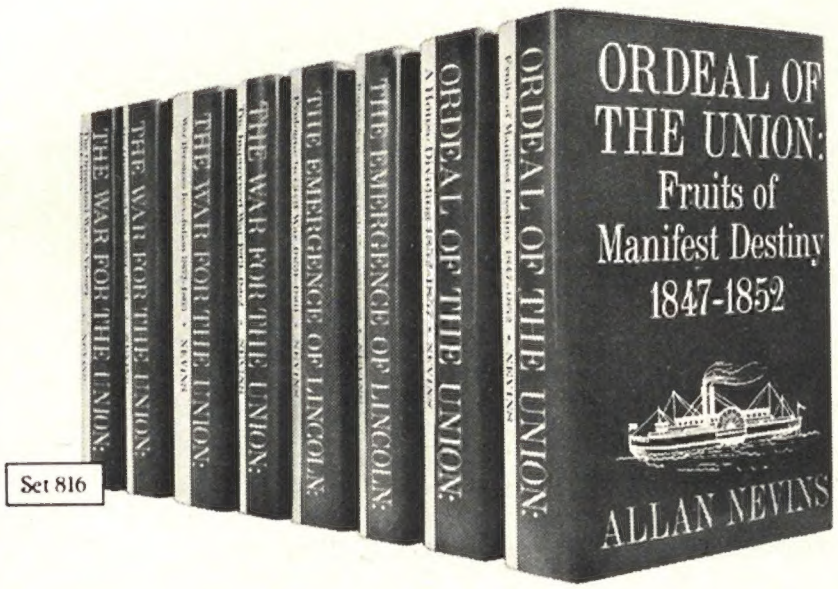
See your travel agent or write Bermuda, Dept. 110.
630 Fifth Avenue, N.Y., N.Y. 10020 or Suite 1422, 401 N. Michigan Ave., Chicago, Ill. 60611 or Suite 1010, 44 School St., Boston, Mass. 02108

Bermuda has nine challenging courses, both public and private, within 21 square miles. Ask your hotel or guest house manager about an introduction to the private ones.

Drink deeply from the wellspring of history...

Choose Any Set For A Dollar A Volume

A rare opportunity to enrich your library with one of these enduring works, at a fraction of its usual cost. Savings up to $112, with trial membership.



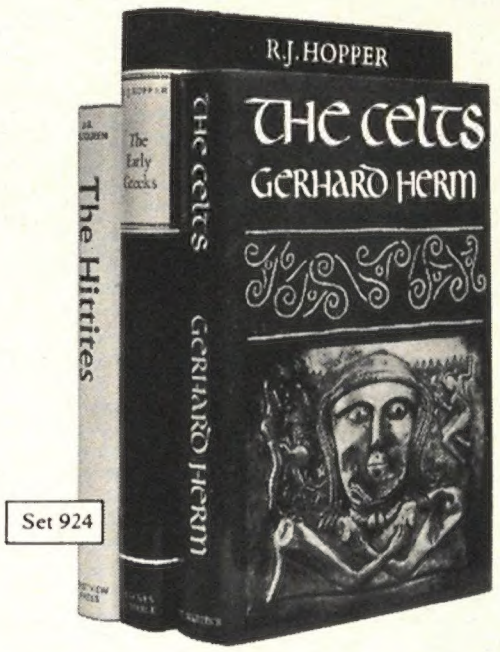
Allan Nevins'

THE ORDEAL OF THE UNION

8 Volumes, Publisher's Price $120.00/ *Yours For Only $8*

The masterwork of this great historian. Monumental account of our national history, 1847 to 1865. Told with a sweep and passion that is almost Tolstoian.

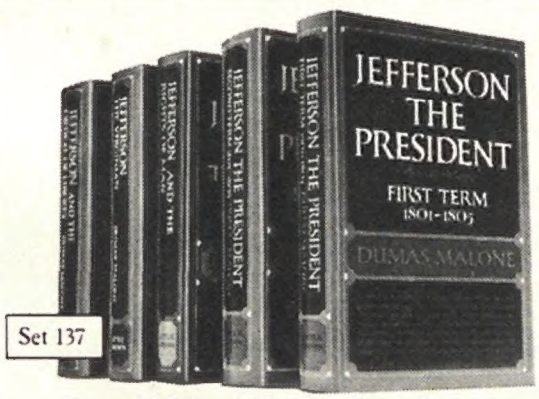
"We are not likely to see more history of this character and scope for some time to come."
—N.Y. Times, National Book Award.



GREAT ANCIENT CIVILIZATIONS

3 Volumes, Publisher's Price $55.50/ *Yours For Only $3*

Exciting studies of history's most remarkable cultures. James Macqueen's *The Hittites*, R. J. Hopper's *The Early Greeks*, and Gerhard Herm's *The Celts*.



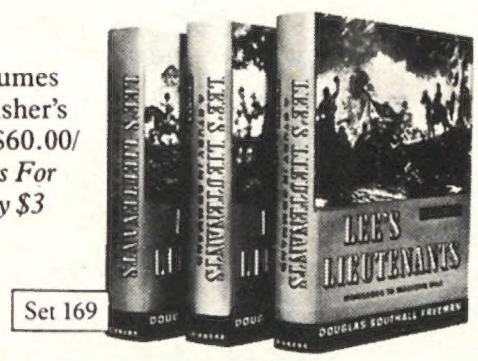
Dumas Malone's Pulitzer Prize-Winning

JEFFERSON AND HIS TIME

5 Vols. Pub. Price $72.50/ *Yours For Only $5*

From his Virginia youth through his troubled second term as president. Biography surpassing anything you've ever read on Jefferson and his world. 1975 Pulitzer Prize.

3 Volumes Publisher's Price $60.00/ *Yours For Only $3*

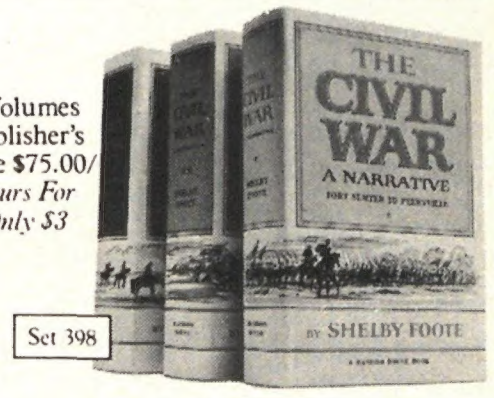


Douglas Southall Freeman's

LEE'S LIEUTENANTS: A STUDY IN COMMAND

The remarkable commanders of Lee's Army of Northern Virginia and how they waged—and almost won—the Civil War. 2,395 pages; 24 portrait photographs; 107 military maps.

3 Volumes Publisher's Price $75.00/ *Yours For Only $3*



Shelby Foote's

THE CIVIL WAR: A Narrative

By a historian who is also a gifted novelist—the opening shot at Fort Sumter through the surrender at Appomattox. "A remarkable achievement, prodigiously researched, vigorous, detailed, absorbing."—N.Y. Times

WH79A

The story of history, and the men who made it, makes for reading that is both lively and valuable.

Now in its 32nd year, the Club provides its members with the finest new books of history and world affairs—always at substantial savings.

For a mere dollar a volume, we'll send you any one of the magnificent sets pictured—with your first selection at the low member's price (any book listed at right).

Membership Benefits

A membership account will be opened for you, to which your purchases will be charged at the low member's prices. You need pay only after you have received your books. A postage-and-packing fee is added to each shipment.

Every four weeks (13 times a year) you will receive our *Review* containing descriptions of new and recent selections. If you want the Editors' Choice, do nothing; it will be sent automatically. If you want another book, or no book at all, return the card by the date specified. If you should receive an unwanted book because you had less than ten days to decide, you may return it and pay nothing. We guarantee postage.

PICK ONE OF THESE SELECTIONS AT THE LOW MEMBER'S PRICE:

(First price is publisher's list. **Boldface** shows member's price.)

161. **A History of American Law.** *By L. M. Friedman.* $17.50/**$10.95**

414. **Russia Under the Old Regime.** *By Richard Pipes.* 1000 years of Russian growth. $17.50/**$10.95**

431. **The Phoenicians.** *By Gerhard Herm.* $8.95/**$7.50**

464. **The Twelve Caesars.** *By Michael Grant.* From Julius in 49 B.C. through Domitian in 96 A.D. $12.50/**$8.75**

673. **Andrew Jackson: And the Course of American Empire 1767-1821.** *By Robert V. Remini.* $15.00/**$9.95**

733. **People of the Lake: Mankind and its Beginnings.** *By Richard E. Leakey and Roger Lewin.* $10.95/**$8.95**

755. **The War Path: Hitler's Germany 1933-1939.** *By David Irving.* $14.95/**$9.90**

728. **A Distant Mirror: The Calamitous 14th Century.** *By Barbara Tuchman.* A vivid reflection of life in the 14th century. $15.95/**$9.95**

721. **The Illustrated Pepys: From the Diary.** *Selected and Edited by Robert Latham.* The most representative passages of Pepy's diary. $15.95/**$10.95**

762. **The Hundred Years War: The English in France, 1337-1453.** *By Desmond Seward.* $11.95/**$8.95**

THE HISTORY BOOK CLUB • Stamford, Conn. 06904

Please enroll me as a trial member and send me the books whose numbers I have entered below. Bill my set at $1 a volume and my other selection at the low member's price, plus postage-and-packing.

Set # _____ Selection # _____

I may return the books within three weeks at your expense and owe nothing. Or, I will buy four more selections within a year *(not counting my choices above)*, and then I may resign at any time. All Club purchases are at low member's prices, and a postage-and-packing fee is added to all shipments. ST-38W

Print Name_____

Address_____

City_____

State_____ Zip_____

In Canada, mail to The History Book Club, 16 Overlea Blvd., Toronto M4H 1A6, Ontario.

SECRETARY OF THE
SMITHSONIAN INSTITUTION:
S. Dillon Ripley

EDITOR AND PUBLISHER:
Edward K. Thompson

EXECUTIVE EDITORS:
Ralph Backlund
Don Moser

BOARD OF EDITORS:
Grayce P. Northcross
Edwards Park
Bennett Schiff
Paul Trachtman
John P. Wiley jr.
Richard L. Williams

ASSOCIATE EDITORS:
Marlane A. Liddell
Dana Little
Dee McRae
Jane D. Scholl
Nancy Seaman

PICTURE ASSOCIATE:
Caroline Despard

ASSISTANT EDITORS:
Michelle I. Galler
Bonnie Bilyeu Gordon
Joyce McCarten
Carol Simons

EDITORIAL ASSISTANT:
Edgar Rich

ASSOCIATE PUBLISHER:
Joseph J. Bonsignore
Production:
Nannie Shanahan
Business:
Carey O. Randall

ADVERTISING DIRECTOR:
Thomas H. Black

CIRCULATION-PROMOTION
DIRECTOR:
Anne Keating

Smithsonian is published monthly by the
Smithsonian Associates,
900 Jefferson Drive,
Washington, D.C. 20560.
© Smithsonian Institution 1978.
All rights reserved.
Reproduction in whole or in part
without permission is prohibited.
Subscription price $12 a year in U.S.
and possessions, $15.50 elsewhere.
Single copy price $1.25.
Second-class postage paid at
Washington, D.C.
Editorial offices, 900 Jefferson Drive,
Washington, D.C. 20560.
Advertising and circulation offices at
420 Lexington Ave.,
New York, New York 10017.
Please address all
subscription correspondence
and change of address information to
P.O. Box 2955, Boulder, Colo. 80322

January 1979

Smithsonian

Volume 9, Number 10

Table of Contents

COVER: Failing to outrace a pursuing vehicle in Kenya, this endangered Grévy's zebra is about to be lassoed, moved 300 miles away in an attempt to "save" it (p. 34)
Photograph by John Reader

10 The view from the castle: Secretary Ripley's comments

12 Letters to the Editor

16 Picture credits

18 Phenomena, comment and notes by James K. Page jr.

26 Around the Mall and beyond by Edwards Park

34 Violent roundup of Africa's rare Grévy's zebra is spectacular to observe, but the cost is high in injury and death
Article and photographs by John Reader

46 Bernard Berenson—a scholar, high priest of culture and agent extraordinary—is the subject of an extensive exhibition at the National Gallery of Art
By Alexander Eliot, photographs by Dmitri Kessel

56 The versatile Roger Stevens, guiding force of the Kennedy Center, has turned the capital into a "good show town"
By Tom Prideaux, photographs by Yoichi R. Okamoto

66 Our older cities are showing their age but also showing signs of fighting back (second of a series)
By Richard L. Williams, photographs by Ralph Morse

78 As insects increase in numbers despite use of chemicals, Integrated Pest Management is farmers' new weapon
By Daniel Jack Chasan
Photographs by Christopher Springmann

88 In Winston-Salem the arts are put in their place—out front
By Bennett Schiff, photographs by Yoichi R. Okamoto

96 Naming the moon's features created "Ocean of Storms"
By Farouk El-Baz, illustrations by W. B. Park

107 Bioethicists of Hastings Center discuss and recommend action concerning matters of life and death
By Jane Stein

116 Book reviews

122 Additional reading

124 January events at the Smithsonian

126 Smithsonian tours

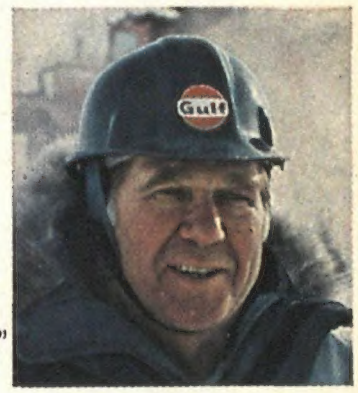
128 Shed a tear, and a quarter, for 5¢ bars
By Richard L. Williams

"It's 52° below zero up here, but, crazy as it sounds, we need this machine to keep the ground frozen."

Left to right: Bob Toole, Jacob Kuhoktak, roustabout, and the freezer.

"When you drill for gas north of the Arctic Circle, the way we're doing here at Canada's Mackenzie Delta, you expect a lot of problems," says Bob Toole, drilling superintendent for Gulf.

"But this one's a real fooler. It's a freezing unit. Even at 52° below zero, we need it to keep the ground around the wellhead frozen.



"At temperatures as low as this, you have to invent new ways to do almost everything."

"The problem is that when the drilling mud comes up from the bottom of the hole, maybe a mile down, it's hot enough to melt the permafrost that's holding up the whole rig.

"If the permafrost melted, the hole would get bigger and bigger, and the operation would have to come to a halt.

"Our freezer keeps the top thirty feet of the casing around the drill pipe at temperatures below freezing, so that doesn't happen.

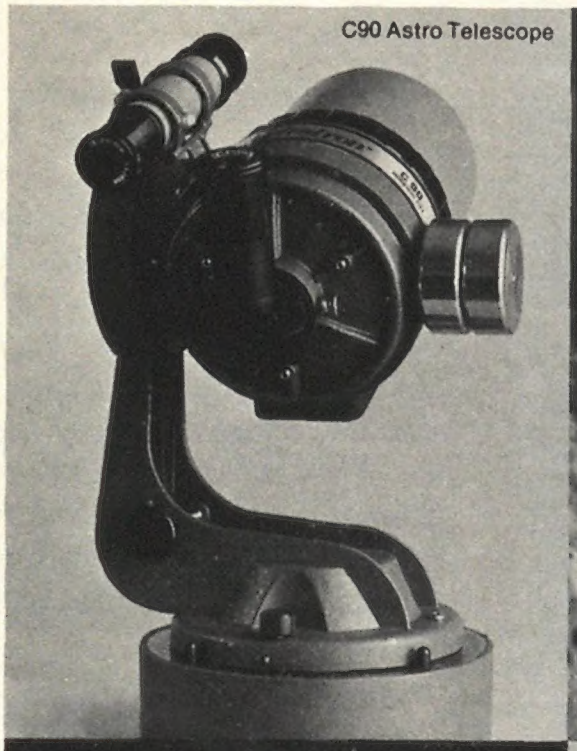
"This country is probably one of the toughest spots on earth to drill for natural gas. But we're drilling the wells. We're meeting the challenge."

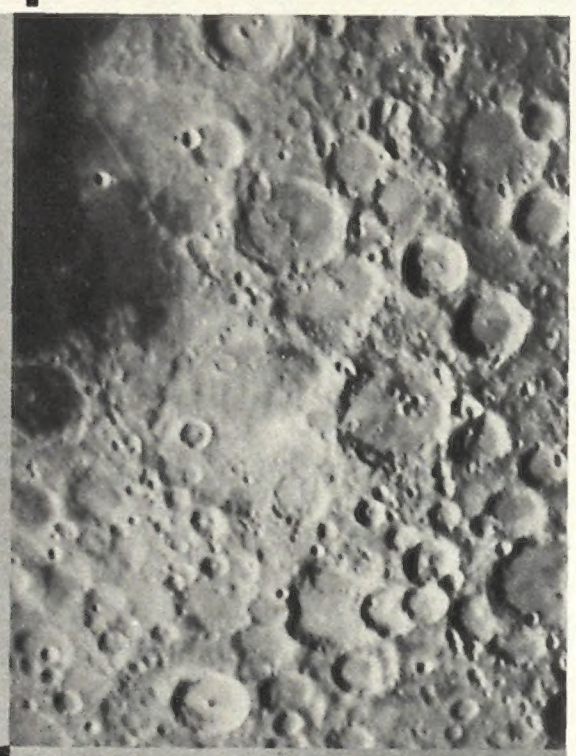
Gulf

Gulf people: meeting the challenge.

Gulf Oil Corporation

Celestron®
Quality Telescopes Worldwide


C90 Astro Telescope



C90 Telephoto

C90 Spotting Scope

The Celestron 90 System
The basic building block of the C90 system is the 90mm aperture, f/11 Maksutov-Cassegrain optical system. The optical system is identical in all three C90 versions. The C90 system combines mirrors and lenses to fold a long optical path (1000mm focal length) into a compact, lightweight, easy-to-use package. But there's more to the C90 system than compactness and optical excellence. There's also an extensive line of visual and photographic accessories.

As a result, the Celestron is a telephoto that's a telescope and a telescope that's a telephoto.

Free 4 page brochure or send $2.00 for 32-page full color catalog on how to select & use a Celestron telescope/telephoto lens.

Celestron International, 2835 Columbia St., Box 3578-D, Torrance, Calif. 90503, U.S.A. Telephone: (213) 328-9560.

Dealer Inquiries Invited

Smithsonian

Board of Regents, Smithsonian Institution

Ex Officio

Chief Justice of the United States
Warren E. Burger, Chancellor
Vice President of the United States
Walter F. Mondale

Appointed by the President of the Senate

Honorable Barry M. Goldwater
Honorable Henry M. Jackson
Honorable Robert B. Morgan

Appointed by the Speaker of the House

Honorable Elford A. Cederberg
Honorable George H. Mahon

Appointed by Joint Resolution of Congress

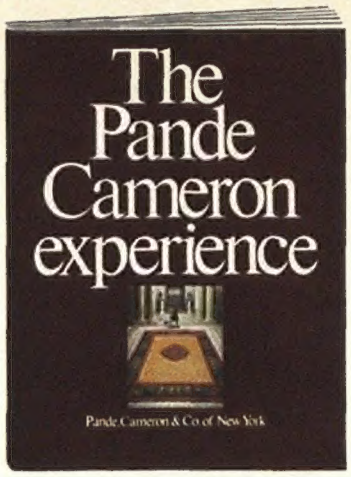
Honorable Anne Armstrong
Mr. John Paul Austin
Dr. John Nicholas Brown
Dr. Murray Gell-Mann
Dr. William A. M. Burden
Dr. Caryl P. Haskins
Honorable A. Leon Higginbotham jr.
Mr. Thomas J. Watson jr.
Mr. James E. Webb

National Board of the Smithsonian Associates

Mr. William S. Anderson, Chairman
Mr. Robert H. B. Baldwin
Mr. Henry C. Beck jr.
Mr. Nicholas F. Brady
Mr. Keith S. Brown
Mrs. Jackson Burke
Honorable William T. Coleman jr.
Mr. E. Mandell deWindt
Mr. Gaylord Donnelley
Mr. James A. Elkins jr.
Mr. Thomas M. Evans
Mrs. Karl G. Harr jr.
Honorable John N. Irwin II
Mr. James M. Kemper jr.
Mrs. Robert A. Magowan
Mr. Scott McVay
Mr. John R. Norton III
Mr. George S. Pillsbury
Mr. Arthur A. Seeligson jr.
Mr. David E. Skinner
Mr. Vernon Taylor jr.

Honorary Members

Mr. Richard P. Cooley
Mr. Joseph F. Cullman III
Honorable Leonard K. Firestone
Mr. Alfred C. Glassell jr.
Mr. William A. Hewitt
Mrs. Lyndon B. Johnson
Mr. Lewis A. Lapham
Honorable George C. McGhee
Honorable Nelson A. Rockefeller
Mr. Francis C. Rooney jr.
Mr. Merritt Kirk Ruddock
Mr. Thomas J. Watson jr.



Pande, Cameron & Co. of New York
Dept. S19, 200 Lexington Avenue
New York, New York 10016

I enclose $3.
Please send me your new, full-color booklet,
"The Pande Cameron Experience."

NAME_____

ADDRESS_____

CITY_____ STATE_____ ZIP_____

Send $3 for our brand-new, full-color showing of India carpets and exciting decorating ideas.

Over 40 magnificent designs shown in glorious full-color photographs! Never before have we offered such an extensive showing of our India handmade carpet collection! Here are ornate French Aubusson designs, intricate Persian designs, dramatic Chinese designs, contemporary Caucasian designs—and still more!

Exciting decorating ideas! Full-color photographs show these spectacular carpets in imaginative settings—living rooms, dining rooms, bedrooms, hallways—decorating ideas for every room.

Complete information on colors and sizes. Why, you can actually use this booklet to plan your purchases—right at home!

Choose from a range of color ways: many carpets come in two, three or four gorgeous color combinations to fit into your decorating scheme.

Choose from a range of sizes: from a 2′x3′ area rug to a palatial 12′x20′ carpet. Many in round, oval, runner sizes, too.

See how these great carpets are made! Every one of these treasured carpets is made in India of the finest wool—hand-knotted and hand-carved. You'll see the making in step-by-step, full-color photographs, taken in India.

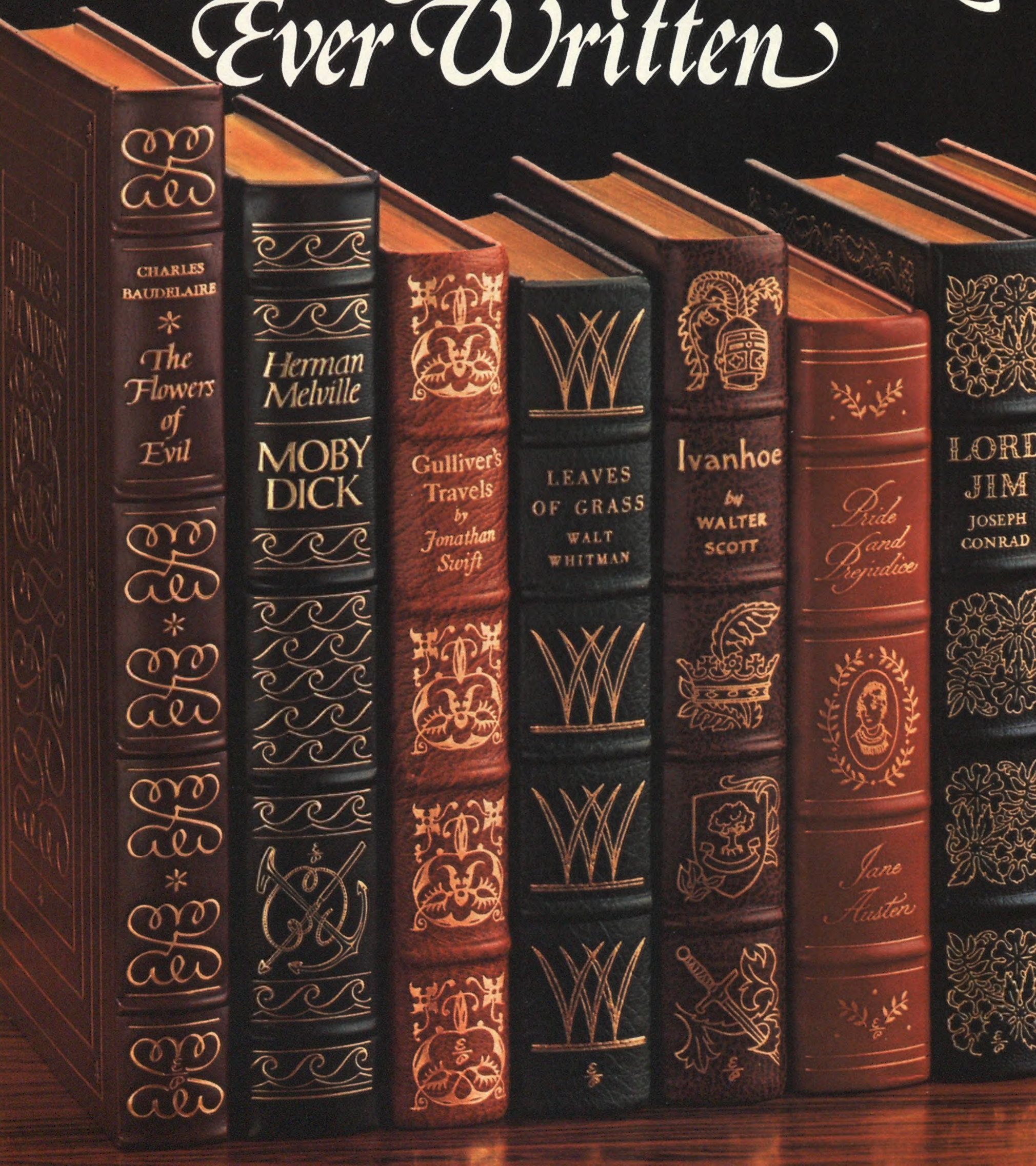
And much, much more! You'll learn what you should know before buying an oriental carpet: How can you be sure you're buying a truly fine oriental carpet? Will it fit into the decor of your home? What are the features that make a Pande Cameron carpet such a wise investment? The answers to these questions are included in this valuable booklet.

Send for your copy today. And get ready for a decorating experience that's far more beautiful, far more romantic, infinitely more exciting than you've ever known before!

MAIL THE ABOVE COUPON AND $3 RIGHT NOW!

You Can Now Acquire a Private Library of Distinction

The 100 Greatest Books Ever Written



The World's Greatest Works of Literature

Bound in Genuine Leather

Decorated with Real Gold

Last Chance to Buy at These Low Prices

This is the FINAL OFFER at these LOW ORIGINAL ISSUE PRICES. Inflationary pressures require a moderate price increase effective April 1, 1979. However, those who enter a new subscription before that date will be guaranteed price protection at original issue prices for the first two full years of enrollment. Act immediately to beat the scheduled price increase, and be eligible to continue to buy these luxurious volumes at our current low prices well into 1981!

Everyone wants to surround himself and his family with objects of lasting beauty, meaning and value—to own with pride and pass on as valuable heirlooms to future generations. There can be no better heirloom than beautifully leather-bound, gold-decorated editions of the world's greatest books.

Now, you can acquire this kind of private library from The Easton Press.

The World's Greatest Books

It isn't difficult to list the world's greatest books. Their titles spring instantly to everyone's mind, because what makes a book great is its ability to have a lasting impact on each new generation of readers. A book becomes great only when it is recognized as being great—generation after generation.

Melville's *Moby Dick*, Dickens' *A Tale of Two Cities*, Chaucer's *Canterbury Tales*, Plato's *Republic*, Thackeray's *Vanity Fair*, Fielding's *Tom Jones*, Hawthorne's *Scarlet Letter*, Dostoevsky's *Crime and Punishment*, Homer's *Iliad*, Brontë's *Wuthering Heights*, Dante's *Divine Comedy*, Swift's *Gulliver's Travels*, Mark Twain's *Huckleberry Finn* and Milton's *Paradise Lost*.

Books like these are the greatest books of all time...the books of *lasting value* that each family wants on its bookshelves.

As Beautiful as They Are Meaningful

The pride that one feels in acquiring this edition of the world's greatest books comes not only from the power and significance of each literary masterpiece. It comes also from the sheer beauty of each book. Every volume in this private library will exemplify the ultimate in the art of printing, illustrating and binding.

Genuine Leather Bindings

Today it is rare to find books bound in genuine leather. The cost of such bindings and the time required to create them has made the crafting of such bindings an almost vanishing art.

But each book in this collection will be bound in genuine leather! The leathers used will be only the finest, and many different types of leathers will be used—calfskin, cowhide, suede, sheepskin—to give even greater distinction to the total collection.

As with every detail of these books, luxury in binding will be the rule rather

(Continued on next page)

The 100 Greatest Books Ever Written

(Continued from previous page)

than the exception. Each volume will have the beautiful lustre, wonderful feel, and distinctively rich smell that is characteristic of only *genuine* leather.

Unique Cover Designs of Real Gold

To further enhance the richness and beauty of your books, each binding will be decorated with real gold. Each cover design will be deeply inlaid with this precious metal. The back cover and the spine of each book will be similarly decorated.

Gilt-edged Pages

Complementing the gold of the leather cover's design is the gilt edging of every page. The pages of every book will be gilt-edged in real gold.

Elegant in Every Way

As final touches of elegance, each book will have beautiful endsheets of the highest quality, contain a bound-in ribbon page marker and be bound with a "hubbed" spine that is used in only the finest books.

The result of all this careful attention to luxury and elegance is a collection of books that brings back memories of the great private libraries of the most discriminating families in days gone by.

Distinctly Different Volumes

Distinctiveness is the watchword of this private library. No two volumes are the same. The leather used in the bindings will be of many colors and grains. The type styles and illustrations will vary from volume to volume matching the unique character of each of the individual works. The design on each volume's leather cover will be different, with no two alike. Even the sizes of the books in the collection will vary.

Beautifully Illustrated Books

Each volume of "The 100 Greatest Books Ever Written" will be beautifully illustrated. In many cases, authentic illustrations from the period of the literary masterpiece will be used. In others, specially commissioned art from leading illustrators has been created to impressively complement the specific book.

Whether it be finely detailed black and white etchings or dramatic full color paintings, the illustrations used in each book will be selected to match the mood and meaning of the author's work.

A Truly Personal Library

When you acquire this edition of "The 100 Greatest Books Ever Written" you are building a personal library that will be one of your most prized possessions. To beautifully identify each book in the edition as part of your own private collection, a unique personalized nameplate will accompany every volume.

The Acquisition Plan

Books of the quality of the volumes in this collection are not generally available today, and they cannot be mass produced. Because of the extraordinary care and craftsmanship required of fine bindings such as these, the books in the collection will be issued at the rate of one per month.

Comparable books bound in genuine leather sell for as much as $50 to $75 per volume. However, you will be pleased to learn the volumes in this collection will

be priced at only $28.50 each for the first two full years of your enrollment. Future volumes will be similarly priced subject only to minor periodic adjustment to reflect varying material costs.

If you desire, you may return any volume within 30 days for a full refund of your purchase price. Moreover, you need purchase volumes only as long as you choose to do so; you may cancel your subscription at any time.

Last Chance to Buy at These Low Prices. R.S.V.P. by March 31, 1979

The editions in this outstanding series are currently priced far below comparable deluxe leather-bound editions. We simply cannot maintain our current low prices much longer—inflationary pressures require a moderate price increase effective April 1, 1979.

However, each new subscriber is given guaranteed price protection during the first two full years of enrollment. Thus, if you enroll as a new subscriber by March 31, 1979, you will be eligible to buy these luxurious editions at current low prices (just $28.50 per volume) well into 1981!

To take advantage of this significant guarantee—and beat the coming price increase—you need only complete the subscription reservation below and return it to us by March 31, 1979. This simple step is all that is necessary for you to begin building a private library of your own that is sure to be envied by those who see it, and treasured by all who use it.

MUST BE POSTMARKED BY MARCH 31, 1979
TO QUALIFY FOR TWO YEAR PRICE PROTECTION AT CURRENT LOW PRICES.

The 100 Greatest Books Ever Written

The Easton Press
47 Richards Avenue
Norwalk, Conn. 06857

No payment required.
Simply mail this subscription reservation.

Please send me the first volume of "The 100 Greatest Books Ever Written" bound in genuine leather and reserve a subscription in my name. Further volumes will be sent at the rate of one book per month at $28.50* each. I understand that this price will be guaranteed for the next two full years.

I may return any book within 30 days for refund, and I may cancel at any time. I understand that you will send me a list of books scheduled for future monthly shipment. I may indicate which titles on this list, if any, I do not want to receive, thereby insuring that I never receive any books I do not want.

**Plus $1.50 per book for shipping and handling.*

Name_____

Address_____

City, State_____ Zip_____

Payment Options (Check One):

☐ Charge each volume to my: ☐ Master Charge ☐ Visa

_____
CARD NO. EXPIRATION DATE

☐ Enclosed is $30.00** (payable to Easton Press) for my first volume.

☐ Bill me $30.00** for my first volume.

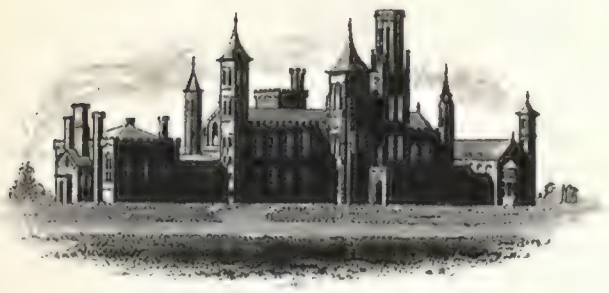
Signature_____

166

**Connecticut residents pay $32.10 to include sales tax.

Secretary Ripley's comments

The view from the castle



'Ecology'—a word on everyone's tongue, but not always understood—means something different in Europe from what it means here

America has always been viewed as a land of paradox: rich and poor, plenty and scarcity, unbounded resources and shortages of supplies, unparalleled education and widespread ignorance. There are huge contrasts within our thinking—extraordinary liberality and wastefulness on the one hand, and passionate interest in the theoretical idea of ecology and conservation on the other.

In America, technology has taken over farming—not only the so-called "agribusiness" we hear so much about, but also the "little" farmer, who in order to compete must acquire more and more heavy equipment and, therefore, more acres to justify the investment. Perhaps one day we shall be drinking artificial milk compounded from soybeans, and cows will be exhibited in zoos as quaint reminders of the past. Technology also has taken over large areas of conservation, which is now a subject for engineers rather than lovers of nature: dams, flood control, sewage and sludge disposal, and giant road construction.

All of this is a symbol of how progress in this country is still linked with conspicuous waste, of how our dreams of organized life must comport with development. It has contagious qualities, this pattern for the short term, and lately it has been catching on rapidly in Europe.

To visit Europe and talk of conservation is again to present a paradox for us as Americans. In Europe conservation is an unspoken affection for the land by farmers who still farm in the old ways, and a dedication to hunting as a sport which entails large tracts of land, social rituals and conventions in its pursuit, and therefore—to many—connotes a kind of pseudoelitism. Of course, there are very few rich people in Europe anymore, and most of the traditional hunting is pursued by middle-class town folk or farmers. Conservation as such is thus not mobilized the way it is in the United States.

And what of ecology? Ecology is a little-understood word which has crept into everyday speech. I heard a bishop the other day say "pray for our ecology." I doubt that he knew whereof he spoke, but it sounded progressive at the time and a pledge to faith. Ecology is simply the science of the interrelationship between organisms and their environments.

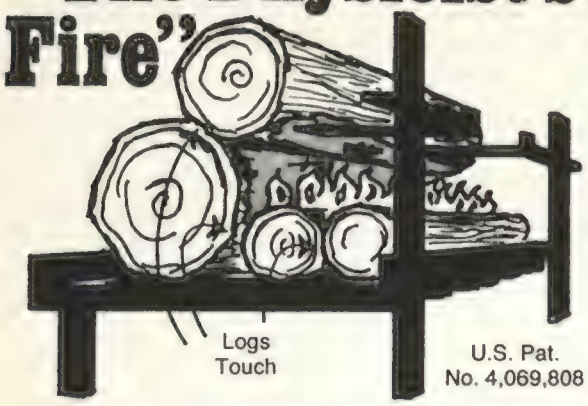
In Europe today "ecology" is understood as a technical term, allied with planning, urban design, greenbelts and spatial relations. Such work is being performed by biologists in concert with architects, engineers and technocrats in a way that, for the most part, has been practiced imaginatively only by the private sector in our country.

At the moment Europe is drawing back and looking at America with some dismay. We seem not to be quite as clever as we once made out. The essential conservatism of those who live on densely populated land, as in Europe, serves them in good stead in thinking of their resources in rather carefully measured terms. That is the only way to keep them. In America, as we express our enthusiasm for conservation and ecology "causes" en masse, let us not at the same time trample the objects of our affection to death with engineering and technological nursing care.

S. Dillon Ripley

GM
MARK OF EXCELLENCE
75 NORTH
EXPRESSWAY
28 NORTH
SCENIC ROUTE
The 1979 Buick Electra.
How you get there is as important as where you're going.
BUICK
After all, life is to enjoy.

"The Physicist's Fire"



Hot, even, slow-burning, easy to start, is how *TIME* described the simple, elegant fire designed by research physicist Lawrence Cranberg. (Science Section, Dec. 22, 1975).

Place logs on the patented Texas Fireframe® grate to form a slot-shaped cavity that faces you. Ignite paper in the cavity.

Eureka! The fire takes hold quickly, burns evenly, steadily *in* the cavity. That means the cavity throws a *beam* of radiant energy at you, so the fire is hot but fuel-efficient.

Texas Fireframe's height-adjustable arms give you easy set-up and a new option for control of the fire. The arms lock by friction.

From *Scientific American*
(August, 1978, pp. 142–146)

"Cranberg's conception of the radiation pattern from his log holder is correct . . . little of the radiated heat was lost upward to the overhang or the chimney . . . nearly all of it must have been coming out into the room."

"The burning was slower with this arrangement, and flames . . . were uniform across the length of the slot (cavity) and required no rotation or stirring of the logs."

From Texas Fireframe Mail

"Your Fireframe performs very well indeed. It easily held the first floor of our house at 70°F—with 20° outside—with no help from the central heating system," Carl M. Zvanut, Paoli, Pa.

"It is easy to rebuild the fireslot while the fire is going." R. D. Keith, Olympia, Wa.

"The greatest thing since the invention of fire," D. D. Walsh, Madison, Ct.

"I am especially amazed at how rapidly the fire catches and disperses without kindling." J. D. Barrier, Universal City, Tx.

A gift that brings warmth and delight.

Fully assembled, no fasteners, 1"-deep steel bars, all-welded construction. Model U-25: 25" front width, 21" back width, 15" high, 15" deep. Model S-25: 25"x21x15x13. Model U-17: 17"x13x13x13. Model U-33: 33"x29x15x15. Simple, copyrighted instructions.

Please send _____ U-25 units @ $39.95 (28 lbs.)
_____ S-25 units @ $39.95 (26 lbs)
_____ U-17 units @ $34.95 (20 lbs.)
_____ U-33 units @ $54.95 (34 lbs.)

Add 10% for shipping in US. Check for $ _____ enclosed.

Name _____

Address _____

City _____ State _____ Zip _____

TEXAS FIREFRAME CO.
P.O. Box 3435 Austin, Texas 78764

Letters to the Editor

James Gordon Bennett

Dear Sir: Julia Lamb's entertaining article in your November issue on the second James Gordon Bennett deserves an answer to: "What remains of this prince?"

What remains is a foundation provided for in Bennett's will for the benefit of New York City newspaper families who qualify by need and length of service. Named the James Gordon Bennett Memorial Corporation (in honor of the testator's father), it holds the residue of his estate, now about $2 million. It awards scholarships averaging a total of $100,000 a year, professionally administered, and other aid.

Bennett didn't spend it all. He saved some for the hired hands.

W. A. Casselman
Chairman, Bennett Corporation
New York City

Dear Sir: Bennett left Stone Villa, his Newport estate, to our family, but two generations later we could no longer afford to keep it. I have inherited two of the 30-inch bronze owls that formerly stood atop the gateposts.

A story handed down in my family explains why the owl occupied such a central place in Bennett's life. We were told that when he was hunting for big game in Africa he fell into a camouflaged pit, dug to entrap elephants, and injured his leg so that he was unable to get out. His cries for help went unheeded until finally some natives rescued him. They said an owl in a nearby tree, persistently hooting, had alerted them that something was wrong.

John F. Millar
Newport, Rhode Island

Dear Sir: An article in *The American Cemetery,* December 1975, claims that during the Civil War the loud hooting of an owl awakened Bennett moments before a Southern attack. He credited the owl with having saved his life.

John J. Cashman
Brooklyn, New York

Père-Lachaise cemetery

Dear Sir: Robert Wallace writes that Père-Lachaise cemetery "is doubtless the most interesting cemetery in the world"—a statement I would like to challenge.

To many musicians, most Russophiles and many others, the most interesting cemetery in the world is within the grounds of the Alexander Nevsky Lavra Monastery in Leningrad. Buried there are: Tchaikovsky, Glinka, Rimsky-Korsakov, Borodin, Mussorgsky and other famous musicians. Among others noted for their contributions to Russian cultural and scientific life are Dostoevsky [see his tombstone below]; the great architect of Italian descent, Karl Rossi; and writer and scientist Mikhail Lomonosov.

While there are no gravestones to contemplate that are as odd as "the man holding his beloved's head," there are a number of interesting and handsome ones carved by outstanding sculptors.

Margaret Lee P. Cobb
Blacksburg, Virginia

Wedgwood Lilac and White Jasperware Tray — 4½"

A faithful reproduction of the club shaped Jasperware Tray first made by Wedgwood in the 18th Century, reversing the original Jasper color combination — a must for collectors.

Start your collection of Limited Edition Wedgwood® with this unique Lilac Jasper Tray—for members only.

Purchase this rare and unusual Lilac Club Tray for $25 and become a member of the prestigious Wedgwood Collectors Society. During the year, you will have at least 8 new Society Special Editions to choose from. Once the original supply is exhausted, no further pieces of that Edition are ever produced.

Whether you're a seasoned collector or a cautious beginner, you'll be in the company of art patrons who've been collecting fine Wedgwood ® for over 200 years.

You'll acquire pieces made available to our members only. Each item bears the Wedgwood Collectors Society seal, which identifies it as a Society Special Edition.

You'll receive a free 4⅜ in. Jasperware membership plaque to identify you as a member of the Society.

You'll receive the Society's Newsletter, where the new Editions are presented, as well as other pertinent news about Wedgwood. There is never an obligation to purchase anything and nothing will ever be sent to you without your first placing an affirmative order.

Membership costs $15 a year. But if you *act now*, your first year's $15 can be applied toward the purchase of the Lilac Club Tray shown above.

We cannot promise you that the value of any specific item will increase, but because of the nature of Wedgwood Limited Editions, the likelihood is great that it will. Traditionally, Wedgwood items have been sound investments. Items are offered subject to prior sale.

The FREE Blue & White Membership Plaque.

Wedgwood Collectors Society
41 Madison Avenue, Dept. SM
New York, N. Y. 10010

Please check one:

☐ Enroll me as a Member of the Wedgwood Collectors Society. My first acquisition is the Lilac Club Tray for which I am enclosing $25. Send my Membership Plaque at no added cost, and waive my first year's $15 Membership Fee.

☐ I do not wish to acquire the Lilac Club Tray at this time. However, enclosed is my payment of $15 for first year's Membership Fee. Please enroll me as a Member, and send my Membership plaque at no added cost.

Payment enclosed for $ _____

Or Charge: ☐ Bankamericard (Visa) ☐ Master Charge

Account # _____ Expiration Date _____

Signature _____

Name _____

Street _____

City _____ State _____ Zip _____

(Residents of New York City please add 8% for State and City Sales Tax. Other residents of New York State and residents of California, please add applicable State and Local taxes.)

Wedgwood is a U.S. registered trademark of Wedgwood Ltd.

What your home could have in common with the Met, the Tate, and the Louvre.

Beautiful, original works by artists who are represented in the world's great museums and galleries can be yours for very reasonable prices.

Cuca Romley's *Winter Solstice*

We offer original etchings, lithographs and serigraphs signed by Calder, Chagall, Dali, Delacroix, Renoir and other important artists.

(Cuca Romley's delightful etching, *Winter Solstice,* delicately hand-colored by the artist, is just one of the many fine prints we've recently made available.)

Our expert advice and full money-back guarantee are your assurances that the art you buy will have lasting value and beauty.

Send for our colorful, descriptive brochure, without obligation.

Original print collectors group, Ltd.

120 East 56th Street, Dept. S-39, New York, N.Y. 10022

☐ PLEASE SEND ME YOUR FREE COLOR BROCHURE, LATEST NEWSLETTER AND OTHER INFORMATION.

Name

Address

City State Zip

The price is outrageous, but so is the quality.

Quality...so much deeper than visual or sensual appeal. Each piece in the Cado Collection embodies the essence of design, material and workmanship. Cado...rugs, seating, dining sets, bedroom sets and wall systems...crafted to endure for generations to come. In this age of obsolescence, Cado furnishings are a sagacious investment in quality.

For the dealer nearest you write: CADO, Box 62, 57-08 39th Ave., Woodside NY 11377.

CADO

Dear Sir: Your article on Père-Lachaise cemetery is interesting and beautifully illustrated, but I am at a loss to understand your references to Prosper Mérimée, who is buried in the Protestant cemetery in Cannes.

Barbara S. McCrimmon
Tallahassee, Florida

Miss McCrimmon is correct. The Mérimée buried in Père-Lachaise was Jean-François Léonor (1757-1836), a chemist-painter and father of Prosper. Ed.

American cities

Dear Sir: As architects and planners of large-scale projects, Welton Becket Associates has a very distinct awareness of all the issues covered in your first article on American cities. Through articles such as yours, the concerned but nonarchitectural sector of the American public is finally becoming constructively aware of the built environment—how it was formed and what we can do to shape it.

It was welcome to see references to Reunion in the article. It is, of course, a Becket project, one of which we are most proud. It would have been even more welcome to read a mention of the architect's name, as with I. M. Pei's city hall. And, by the way, the Hyatt Regency/Reunion is not "blue-glass-sheathed"; it is clad in silver reflective glass so that it takes on whatever the colors are in its environment.

Coriolana Simon
Welton Becket Associates Architects
Los Angeles

Vanishing plants

Dear Sir: I have just spent more than ten hours reading and looking for something mentioned in Edward S. Ayensu's article, "Calling the roll of the world's vanishing plants." What puzzles me is the reference to male bees collecting.

I have raised bees since I was a small child, earning spending money selling honey even when I was in college. Now, in my sixties, I have an extensive library on bees, inherited from my father.

The male bees, in this country at least, do not collect anything. They live a drone's life—their sole purpose is to fertilize the queen. It would be a good idea to know about males that collect from blossoms so that we could put them to some use.

You'll always wonder why you waited so long.

Every year it's our pleasure to see about 3000 people buy Steinway pianos.

One thing we've observed is that for most people, the path to a Steinway® is no hop, skip and jump. People buy Steinways very deliberately. Sometimes, too deliberately. The time spent putting off buying a Steinway could be time spent enjoying one.

So if you're on the road to a Steinway, here's a shortcut. Visit one of our showrooms. Stretch your fingers over a Steinway keyboard. Play the most delicate passage you know. The loudest. The fastest. Your music will sound richer and feel better (maybe because you're better) than you ever thought possible.

Suddenly for all your reasons to put off buying a Steinway, you can't imagine playing anything else. Say the word and a Steinway dealer can help you take one home.

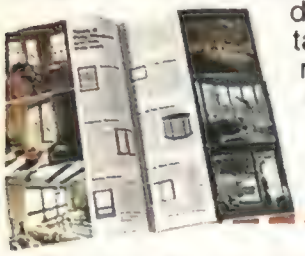
If you don't know your Steinway dealer, Mr. John H. Steinway will arrange an introduction. Write to him at Dept.22, 109 West 57th Street, New York 10019.

Steinway & Sons

Free Offer from Pella.

A window and door idea book for building or remodeling.

16 pages in full color packed with interesting examples of how the right windows can add beauty and liveability to your home. Tells how Pella Wood Windows make washing easier, cut energy costs and need no painting. Contains a helpful guide to different window types, and how each works. Describes the important things to consider in proper placement of windows. In short, it contains everything you need to know to make an intelligent decision about windows. And it's yours free!



Please send me a free copy of "Pella Window and Door Ideas."

Name _____

Address _____

City _____

State _____ ZIP _____

Telephone _____

Mail to: Pella Windows & Doors, Dept. C16A9, 100 Main St., Pella, Iowa 50219.
Also available throughout Canada.
This coupon answered within 24 hours.

© 1979 Rolscreen Co.

Only Pella offers it all.

I loved that article although it made my heart ache at the damage to nature we are perpetrating. (I am a descendant of John Quincy Adams who was the first custodian of Mr. Smithson's money!)
Deborah Adams
Wayne, Pennsylvania
Miss Adams is referring to honeybees. Dr. Paul Hurd, the Smithsonian's bee specialist, says there are approximately 21,000 species of bees worldwide. In the case of specialized orchid bees mentioned in Dr. Ayensu's article, it is thought the material collected by the male bees may undergo a chemical change and become an attractant for females. Ed.

Dear Sir: I suggest that someone missed a decimal point in the statement that 247 million acres of new desert are created each year in North Africa.
John M. Peterson
Lawrence, Kansas
The figure should have been 247,000 acres. Ed.

Ogopogo

Dear Sir: Although for many years we were undecided on the question of lake monsters, we have said our good-byes to Nessie and her kind. In the year that we have sailed our sloop on inland waters, we have seen phenomena almost identical to many of the published photographs of surfaced prehistoric reptiles.

Ed Fletcher's photograph of Ogopogo is strikingly like the motorboat wakes we have seen twice. In late afternoon the wind usually dies, leaving a persistent low swell; at such times, a large motorboat traveling at low speed in the direction of the swell will lay down a wake that will stretch a surprising distance behind. At some point along the wake, the sides of the waves will appear dark and produce five or six "humps" guaranteed to capture both the attention and imagination of the observer. We have seen such humps pass by us eight or ten minutes after the motorboat.
Tonia and *Roy Parish*
Milton, Florida

Maritime Hall

Dear Sir: A tar named "McVitty" is credited with the scrimshaw work of a ship on a whale's tooth, but we recognized our family name of Hewitt. We feel that Josh Hewitt should be credited with this beautiful work.
Ruth Hewitt Vater
New Britain, Connecticut
Josh Hewitt should get the credit. He sailed on the Florida *out of New Bedford, December 1858-October 1861.* Ed.

To get in a famous last word . . .

Dear Sir: Michael Olmert's article on topic sentences was most enjoyable. I suggest the following additional first liners: "Christmas won't be Christmas without any presents," grumbled Jo, lying on the rug. *(Little Women)*

They threw me off the hay truck about noon. *(The Postman Always Rings Twice)*
Elmer Gantry was drunk. *(Elmer Gantry)*
Rosemary Dyer
Norway Memorial Library
Norway, Maine

Around the Mall and beyond

Dear Sir: Edwards Park's report on Smokey the Bear's new home did not mention a unique fact. Smokey is the only individual in the United States to have his own private Zip Code number (20252).
Lee Ratzan
Newark, New Jersey
Not only does Smokey have his own Zip Code, he receives 400 letters a day. Ed.

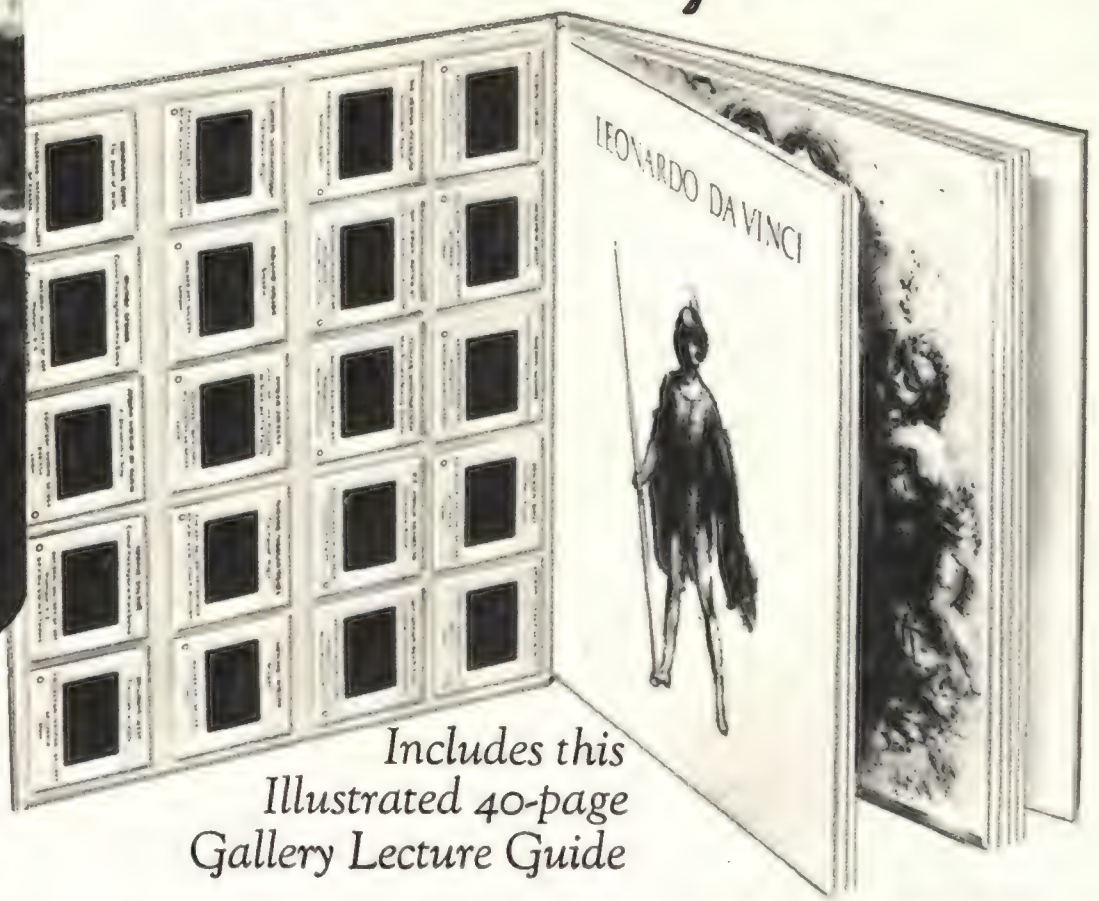
Continent's first astronomers

Dear Sir: Congratulations on Ray Williamson's "Native Americans were continent's first astronomers," in your October issue. It is an astonishing and enlightening addition to our insight on the Anasazi. However, I must correct the location of Hovenweep Castle. It is in Utah, not New Mexico.
Glenn L. Lembke
San Antonio, Texas
Mr. Lembke is correct. Ed.

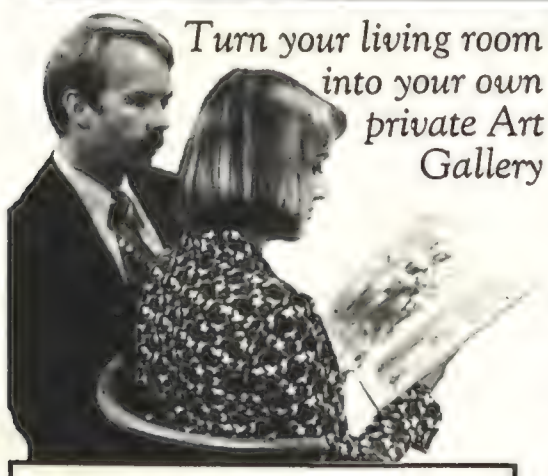
Picture credits

Cover John Reader; 12 Toni Crane; 24 © 1978 by Jill Krementz; 26 John Tennant; 34-45 John Reader; 46 Dmitri Kessel; 47, 48 Dmitri Kessel, *Life* © 1948 Time Inc.; 49 Dmitri Kessel; 50 courtesy I Tatti; 50, 51 Dmitri Kessel; 51 courtesy I Tatti, Katie Lewis, Photo Levi; 52, 53 Dmitri Kessel; 54, 55 courtesy National Gallery of Art; 56-63 Yoichi R. Okamoto; 66-75 Ralph Morse; 78, 79 Christopher Springmann; 80 Liane Enkelis; 81-85 Christopher Springmann; 88-95 Yoichi R. Okamoto; 96-104 W. B. Park; 107-109 Yoshikazu Aono; 110, 111 Farrell Grehan; 112-115 Yoshikazu Aono; 124 Smithsonian Institution; 125 John Tennant; 128 John Huehnergarth.

20 Color Slides of da Vinci Masterpieces for only $1 (comparable value $20)



Includes this Illustrated 40-page Gallery Lecture Guide



Turn your living room into your own private Art Gallery

HERE'S WHAT YOU GET FOR ONLY $1

LEONARDO DA VINCI, a handsome Album with 20 beautiful color slides, including the beautiful and enigmatic "Mona Lisa" (shown above), radiant in her true colors and actual size . . . the tenderly evocative "Madonna and Child with St. Anne" . . . "St. John the Baptist" . . . "The Adoration of the Magi" . . . stunning details of the legendary "Last Supper" . . . and other priceless art treasures by Leonardo. The Album also contains an illustrated 40-page guided lecture by Renaissance authority Helmut Wohl, who gives you revealing background on the paintings and the enigmatic genius who created them.

The Color Slide Program of the Great Masters

Come with us. To meet the legendary Leonardo. And share in the exciting discovery of the most celebrated masterpieces of all time.

Come to Paris, and behold the enigmatic smile which has fascinated men for centuries . . .

Visit Florence, and discover young Leonardo's first spark of brilliance in a painting that shamed a great teacher . . .

Travel to a refectory in Milan . . . to stand before the most unforgettable fresco in the world and sense the impending martyrdom of Christ.

LEONARDO DA VINCI—the complete Art Album with 20 full-color slides and handsomely illustrated Gallery Lecture Guide—is yours for only $1 as your introduction to the McGraw-Hill Color Slide Program of the Great Masters. There is no obligation to buy anything more.

View the priceless works of art in the full glory of the originals

Each lavish Album contains twenty color slides devoted to the works of a famous master. Created by art photography specialists in Florence, Italy, these exquisite 35mm. slides achieve what small print and art reproductions cannot—for they capture the authentic colors of the original works . . . with every subtle line and detail brilliantly revealed. And they permit you to *view each priceless painting on your home screen in the full glory of the original.*

In addition, bound into each Album is an illustrated, 40-page Guide in which a noted authority points out important aspects of each painting and shares with you fascinating glimpses of the artist himself.

As you view the paintings projected on your wall and read the absorbing commentary, you and your family will discover a whole new dimension in the enjoyment of art. Indeed, it is much like taking your own "private tour" with an art expert at your side.

The Program is flexible—the cost is low

Approximately every six weeks, you are offered a complete new Color Slide Album of 20 distinctive slides and an illustrated lecture. Forthcoming Albums will be devoted to the lives and works of such great masters as Michelangelo, Winslow Homer, Rembrandt, Gauguin, and Picasso, Chagall, Van Gogh, Lautrec, etc.

If the slides were available from museums, you would expect to pay as much as $20 a set. Yet, as a member of this new Program, you pay only $9.95 for each complete Album—including 20 color slides and 40-page illustrated lecture. And you may take as few or as many as you like.

Accept this $1 demonstration offer

To introduce you to the McGraw-Hill Color Slide Program of the Great Masters, we will send you Leonardo da Vinci, complete, for 15 days trial. If you are delighted with the demonstration, send only $1, plus a few cents for tax and shipping. If not thrilled with the introductory Album, simply return it within 15 days; and you will be under no further obligation. Mail the attached card today.

If you do not have a projector: here's an unusual opportunity. We can offer you the sensational Kodak Carousel BC 604 Projector supplied with a 500-watt lamp, and 4-inch f/2.8 Ektanar lens. This top-rated projector shows all regular 2″ x 2″ 35mm. slides up to 1/16-inch thick. It has dependable gravity feed and you have instant access to any one of its 140-slide capacity at any time. List price $122.50—subscribers' price only $85.95, plus tax. Remittance must accompany trial subscription form. If you are not completely delighted with the projector, you may return it in 15 days for a full refund.

If Reply Card has been removed, write McGraw-Hill Color Slide Program of the Great Masters, Dept. FC-108, 1221 Ave. of the Americas, N.Y., N.Y. 10020.

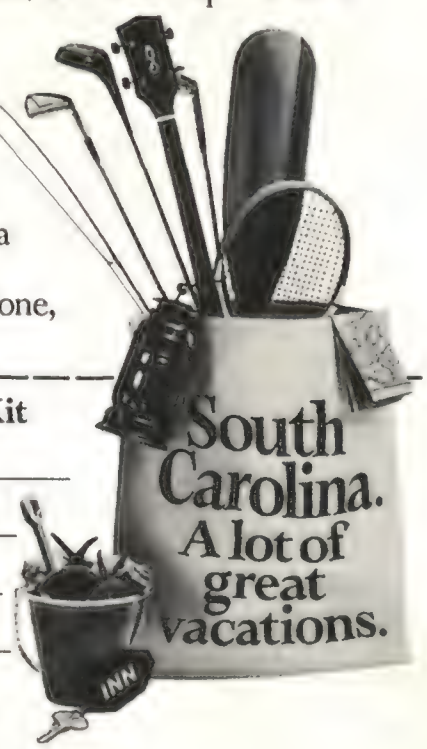
South Carolina's Great Vacation No.17

The Sea Islands

We have 17 Sea Islands where you can find beaches, sun-drenched resorts, catamaran sailing and horseback riding. Or solitude.

The Sea Islands. Where vacationers, golfers and tennis players have found a mecca. Rare wildlife and waterfowl are here, too. In resort communities designed not to intrude on nature, but to complement it.

And there's still room, here among the dunes and marshes and moss-draped oaks, for the solitary beachcomber. A walk on the shore yields marvelous treasures. Shells, driftwood, a silent communion with the sea. Give yourself an island—a South Carolina Sea Island. Whether you come to play, to feast on native shrimp and oysters, or to be alone, you'll leave happy. And you'll come back.



Send for your FREE South Carolina Trip Kit

Name _____

Address _____

City _____

State _____ Zip _____

South Carolina Division of Tourism, Room 675, Box 78, Columbia, S.C. 29202

Phenomena, comment and notes

A personal hero dies, limitless fuel in the Earth's interior and how losing weight can help the energy crisis

Last month there was occasion to sound the trumpet in behalf of short people, a gentleman having calculated various aspects of the adverse environmental impact of being tall. There appears to be a trend starting, clearly in response to a growing awareness that resources are not infinite. This month it is people of excess avoirdupois.

Two scientists (both six feet tall or more but thin—170 pounds) from the University of Illinois at Urbana have decided that overeating is not just a health problem for the overeater but a social problem for us all. Using information from a U.S. government survey, they calculated that 75 percent of 146.8 million Americans between 18 and 79 are overweight by 2.3 billion pounds. If the 50 million overweight men and 60 million overweight women in this bounteous land were all put on a diet to achieve proper weight, we would save 5,676,000,000,000 (that's more than five trillion) calories. A calorie is invisible to most, an abstraction. Here, by my calculation, is what that huge number means in terms of common foods: 1.2 billion hamburgers with everything or 4.5 billion martinis or 2.1 billion chocolate éclairs. That's just the first year. If they all stayed on their diets, the nation would save more than three trillion calories each and every year thereafter.

Now then, what do the billions of extra calories mean in terms of fossil fuel? The

scientists say that the average human food calorie requires 28.2 BTUs, accounting for the energy needed for everything from planting to cooking food in this age of energy-intensive agribusiness. This translates into a saving of 1.3 billion gallons of gasoline in the great national diet year, and about 750 million gallons each succeeding year.

And what does that amount of gas do for us? In each of the years succeeding the diet year, that is to say, we would save enough fuel to keep all the lights and appliances working in Boston, Chicago, San Francisco and Washington.

The question is, as in inflation, whether this staggering achievement in energy conservation can be accomplished by voluntary adherence to the goal or does it require draconian federal controls? Should overweight people pay more, for instance, on federally regulated or subsidized transportation systems? And what will the American Civil Liberties Union think? The arguments could be as intense as the current hysteria over smoking in restaurants. It boggles the mind . . . waiter, bring another éclair.

Outgassing Earth

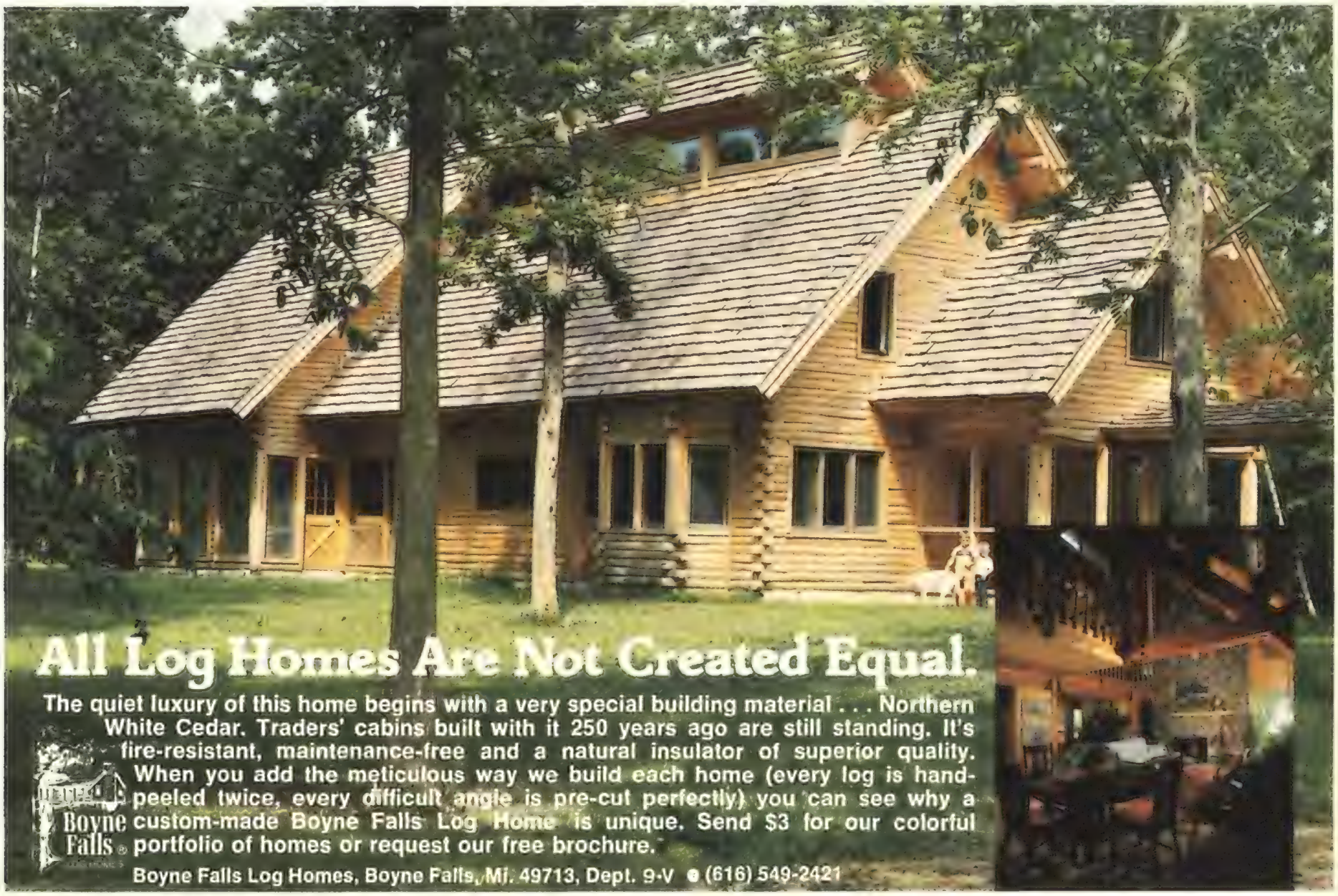
The matter of energy, with which the scientific literature is properly filled these days, leads us oddly enough into the subject of earthquakes and the theories, oddly enough again, of an astrophysicist about these regular but not quite yet predictable events that people never seem to worry about too much when planning a suburb or building a nuclear power plant.

There is a lot of what used to be thought of as folklore about events taking place before an earthquake: the night sky brightens, the well water rises, horses and dogs become agitated, and so forth. Recently, earthquake specialists have found evidence that the common folk aren't so dumb after all, and events like these do often take place before a quake.

Perhaps, like the Chinese, we should be on the lookout for such phenomena, the better to evacuate people when Mother Earth decides it's time for part of California to secede into the Pacific Ocean.

Enter Thomas Gold, a space researcher at Cornell University, who has the reputation of being someone unafraid to try out a new thought, and who apparently was momentarily preoccupied with the question of how the Earth formed out of the gases swirling about our sun back in the old days, when earthquake folklore came to his attention. Specifically, he and others of his fraternity have wondered why, if Earth coalesced from a cloud of gases and minerals, various elements are so unevenly distributed throughout the planet. Carbon, for example (and a good example, too, because that's the element life is based on) is concentrated only in the outer portion of the Earth, with very little in rocks formed at greater depths.

Professor Gold, according to *Technology Review* (Vol. 81, No. 1), says carbon used to be evenly distributed, but the pressure down there has been pushing it out in the form of methane (CH_4), a stable gas which an energy-short world is beginning to covet. Professor Gold sees an Earth in which methane is being squeezed toward the surface through pores and microcracks in the rock, or through larger outlets such as volcanoes, petroleum wells and—yes—fault lines, the sites of earthquakes. As a quake gets under way, meth-


All Log Homes Are Not Created Equal.
The quiet luxury of this home begins with a very special building material . . . Northern White Cedar. Traders' cabins built with it 250 years ago are still standing. It's fire-resistant, maintenance-free and a natural insulator of superior quality. When you add the meticulous way we build each home (every log is hand-peeled twice, every difficult angle is pre-cut perfectly) you can see why a custom-made Boyne Falls Log Home is unique. Send $3 for our colorful portfolio of homes or request our free brochure.
Boyne Falls
Boyne Falls Log Homes, Boyne Falls, Mi. 49713, Dept. 9-V • (616) 549-2421

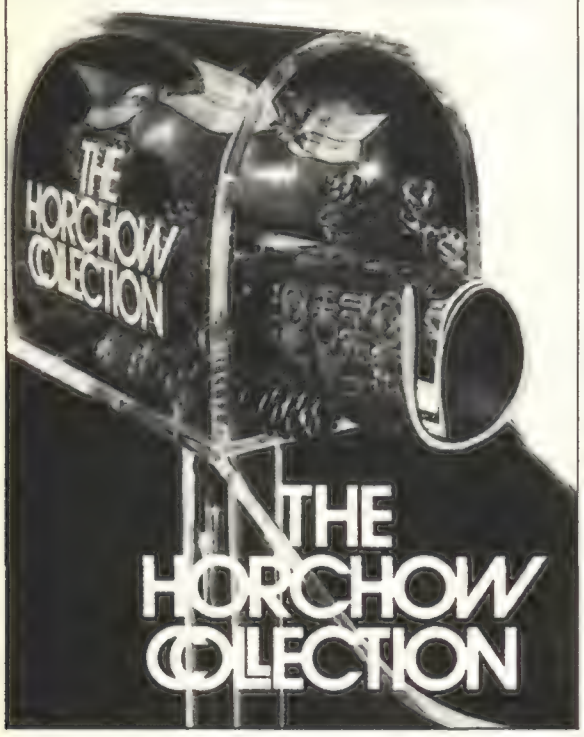
As Close As Your Mailbox

A world of exclusive gifts, home decor items, fashions and accessories. For free catalogues, call TOLL-FREE 800-527-4535 in the continental U.S. (in Texas, call TOLL-FREE 800-492-5270) or mail this coupon to:
The Horchow Collection,
P.O. Box 34257, Dept. 41207,
Dallas, Texas 75234.

Name

Address

City State/Zip



THE WHITE RABBIT

An endearing rabbit, charmingly sculptured by Joan Hagen. In smooth stone-finish Alvastone®, 7¼" high. Order by mail or phone: JH-1. $22 ($1.70 shipping). Major credit cards. (N.Y., Conn. residents add sales tax.)

Free with your order—6000 years of art in our full-color catalog of fine sculpture and jewelry replicas from museums and private collections around the world, or send $1.

MUSEUM COLLECTIONS

Dept. SM1 P.O. Box 7000,
Greenwich, Conn. 06830
or call, 1-800-243-4492 toll-free

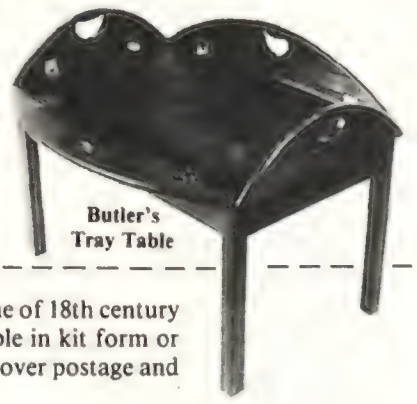
If not completely satisfied, return undamaged within four weeks for a full refund.

Block-Front*
Circa 1760-1780
Chippendale

Queen Anne
Lowboy*
Original
Circa 1750,
New England

Ready to Assemble and Finish 18th Century Furniture

Some of the 24 Bartley classics, in hand crafted solid mahogany, oak or cherry. Totally authentic in design and beautifully constructed. Each kit is easily assembled and finished in your own home without tools. All pieces also offered completely assembled and hand finished.



Butler's
Tray Table

*Henry Ford Museum Reproductions

Please send me your illustrated catalogue of 18th century antique furniture reproductions available in kit form or hand finished. I am enclosing $1.00 to cover postage and handling.

Name

Address

City/State/Zip

The Bartley Collection, Ltd.

747 Oakwood Avenue, Dept. S-12 Lake Forest, Illinois 60045

ane emerges, and surface dust collides, creating sparks that ignite the escaping methane, perhaps explaining the flames, explosions and other fireworks often associated with earthquakes.

Indeed, Professor Gold says that the Earth's supply of petroleum cannot be accounted for only by organic matter decaying over the eons. It's the carbon that is still being forced crustwards by the pressure of the planet's interior. Indeed, he suggests there may be enough methane down there, heading our way, to take care of our energy needs for millions of years. (Astrophysical types think big.) But, of course, the question is how to tap it. Perhaps the Department of Energy could sponsor Christo, the artist who wraps peninsulas in plastic, to build a gigantic balloon over the San Andreas Fault to trap its unseen treasure.

Grow weeds

Life must seem unfair to the owner of a trim, well-manicured suburban lawn. There is an official list of endangered plant species in the United States, compiled by the Smithsonian (SMITHSONIAN, January 1975) and while a dam has been challenged for one such plant, nowhere on the list can one find those plants that appear to deserve being endangered—dandelions, plaintain, and the like. Damned weeds that are constantly rolling the Sisyphean suburbanite's stone back down the hill of lawn perfection.

What is called for is an abrupt change of mental attitude. This is not to say that anyone has to consider weeds beautiful—that is clearly asking too much. But they *can* be useful, as some recent developments attest.

The first, a report in *Chemical & Engineering News* (Vol. 56, No. 38) may seem a bit remote from our suburbanite's weekend woes, but it could supply some abstract comfort. The U.S. Department of Agriculture—specifically, Dr. Russell A. Buchanan, who is playing very nicely in the Peoria office—has announced that ragweed, sow thistle and other common weeds could become a mainstay of the chemical industry, thus alleviating the big demand for petrochemicals. Many weeds —even temperate-zone weeds—are high in hydrocarbons, oils and rubber. Dr. Buchanan says these weeds could be conveniently moved into the U.S. agricultural system and, after a little genetic

After feeding the kangaroos, catch Madame Butterfly.

Australia. Land of contrasts.

A place to see Puccini in the ultra-modern splendor of the Sydney Opera House. Cuddle a koala. Throw a boomerang. Savor vintage wine. Or stand on top of the world's biggest rock. Here is the home of the kangaroo, the duck-billed platypus and The Great Barrier Reef. Here, the people speak English, Friendship and Sports.

Our spacious DC-10s depart daily to Australia from Los Angeles via New Zealand. Our in-depth Destination Down Under Tour starts at $3,776.* You get 30 days of Australia and New Zealand and a lifetime of memories. Ask your Travel Agent. Or write to us.

*GIT airfare, per person double occupancy.

Air New Zealand
P.O. Box 9000, Van Nuys, CA 91409

Australia sounds like the place for me on an
☐ Escorted ☐ Independent Tour. S179

Name_____

Address_____

City State Zip_____

My Travel Agent is_____

air new zealand

L.L.Bean tm

Outdoor Sporting Specialties

Chamois Cloth Shirt

(For Men and Women)

Sueded Cotton. Looks and feels like high-grade chamois leather. Machine washable and extremely durable. Mr. Bean personally used this shirt on his hunting and fishing trips. Five colors, Navy. Bright Red. Tan. Forest Green. Slate Blue. Men's Regular Sizes 14½ to 20. (No 18½ or 19½) Men's Long Sizes 15 to 19. (No 18½) Women's Sizes 6 to 20.

Please Ship Postpaid

_____Women's Chamois Cloth Shirts @ $13.00
Size_____ Color_____

_____Men's Reg. Chamois Cloth Shirts @ $13.50
Size_____ Color_____

_____Men's Long Chamois Cloth Shirts @ $14.50
Size_____ Color_____

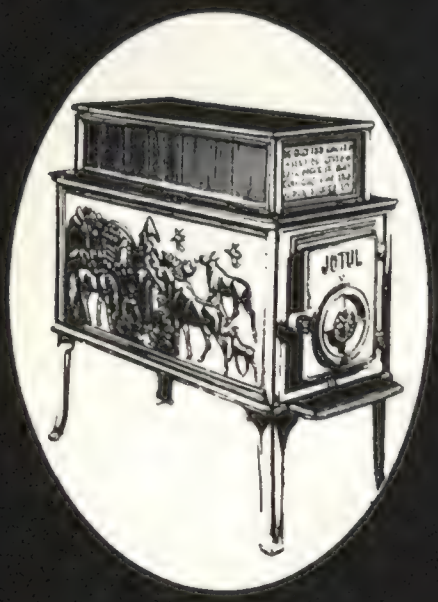
☐ Check Enclosed ☐ Master Charge
☐ VISA ☐ American Express

Card No. _____
☐ **SEND FREE CATALOG** Exp. Date

Name _____
Address _____
City _____
State_____ Zip_____

L. L. Bean, Inc.
1091 Casco St., Freeport, ME 04033

The ultimate in woodstoves . . .



Jøtul.

Send for free brochure on the entire Jotul line. Also available, The Art of Heating with Wood. $1; Sweeping Chimneys. paperback $1. vinyl-covered $2.

KRISTIA ASSOCIATES

Home office: 343 Forest Ave. SM1 P.O. Box 1118. Portland, ME 04104
Western office: 213 SW Ash St. Suite 209 s11. Portland, OR 97204

dealerinquiries invited

engineering and chemical growth stimulation, become even more economically viable. He foresees weed crops growing among traditional crops, and local "botanochemical factories" dispersed throughout a given agricultural region, grinding up the weeds and producing petroleum or rubber and adding a whole new dimension to agriculture.

Of course, if farm profitability goes up (or even if it doesn't) we'll all feel it in the pocketbook. So the other good weed news is that you can eat a lot of them. For someone who doesn't know sheep sorrel from poison ivy, the idea of foraging for wild foods sounds like a certain trip to the nearest stomach pump, but there is help available. A book called *Wild Foods* (Four Winds Press) has just been published. Written by Laurence Pringle, it arose from an article he wrote in SMITHSONIAN (September 1976), and it makes it all sound easy—and delicious. Photographs and drawings make identification certain, and gourmet recipes are thoroughly convincing.

Being the sort who beholds a new food with all of the open-mindedness of a three-year-old and who eschews the dreary diet of the vegetarian with the same athletic desperation with which he ducks drunken bores at cocktail parties, I was astonished to find myself one night slurping up second helpings of Pringle's sheep sorrel soup and lamb's-quarters quiche. And even though I live in the city, not the suburbs, those ingredients grow around my house and I am provided with yet another reason to long for the time when Washington's unconscionably dismal winter turns to Washington's unusually lovely spring, resplendent with azaleas, cherry blossoms and, in my scruffy little patch of yard, dandelions for salad, tea and wine, purslane for casseroles, and my wife's daylilies from which I confidently intend to cook daylily bud amandine.

A hero

There has been, in recent months, some discussion in the public press about heroes or, to be more precise, how our spotlighted, fast-changing and faddish times do not permit heroes to exist. This is a highly debatable point and one which is, like football games, more exactly considered after the fact.

On November 15, 1978, one of my

Centurion Inkwell

Superb solid brass replica of an English antique, circa 1860—English-crafted today just as it was then! A weighty casting, richly ornamented and antiqued, classic acanthus-leaf motif rising to its hinged dome. The well is white porcelain-glazed—and if you no longer use ink, it will hold paper clips handily upright. Dramatic desk decor, the ultimate gift for a collector—especially since we include that authentic white goose quill pen, sharpened and ready to go! Our own proud import.
9946 Brass Inkwell with Pen $12.98

Add $1.50 post. & hdlg. NY res. add taxes. Master Charge or Visa: send card number, exp. date, Master Charge Interbank number.

LILLIAN VERNON
Dept. T15, 510 S. Fulton Ave., Mt. Vernon, NY 10550

The English Wine Table $19.

Our English wine table (c.1784) is an authentic reproduction of a fine old English antique, hand crafted of mahogany with soft detailed leathery top. A traditional favorite in England for over 200 years. Priced directly from our factory at an astonishing $19. $38 for two. Please add $3 each for shipping and handling. Dimensions: 20" high, 13" diameter. Naturally your satisfaction is guaranteed. To expedite your order, telephone us or send check or money order or charge MC/BA-VISA, DC. Please incl. your exp. date. Send $2 for our full color product publication.

The Bombay Company
P.O. Box 53323—Dept. S6
5256 Magazine Street
New Orleans, La. 70153
Telephone: 504/891-4405

Seldom in a lifetime do you have the chance to own an original bronze by a living American master.

This original bronze sculpture, *Pony Express III,* is the creation of the artist Harry Jackson, a man acknowledged by art critics, collectors and museum authorities to be the foremost living interpreter of The American West.

As John Wayne pointed out in an award-winning television documentary, *Harry Jackson, A Man And His Art,* "Harry's bronze catches all the rawhide, bone, muscle, leather, and sweat of the West."

Harry Jackson is a recognized Master whose bronzes have been collected by The Whitney Gallery of Western Art, The Vatican Museum, The American Museum to Great Britain; and privately, by names such as Mellon, Guggenheim, Vanderbilt, John Wayne and The Queen of England.

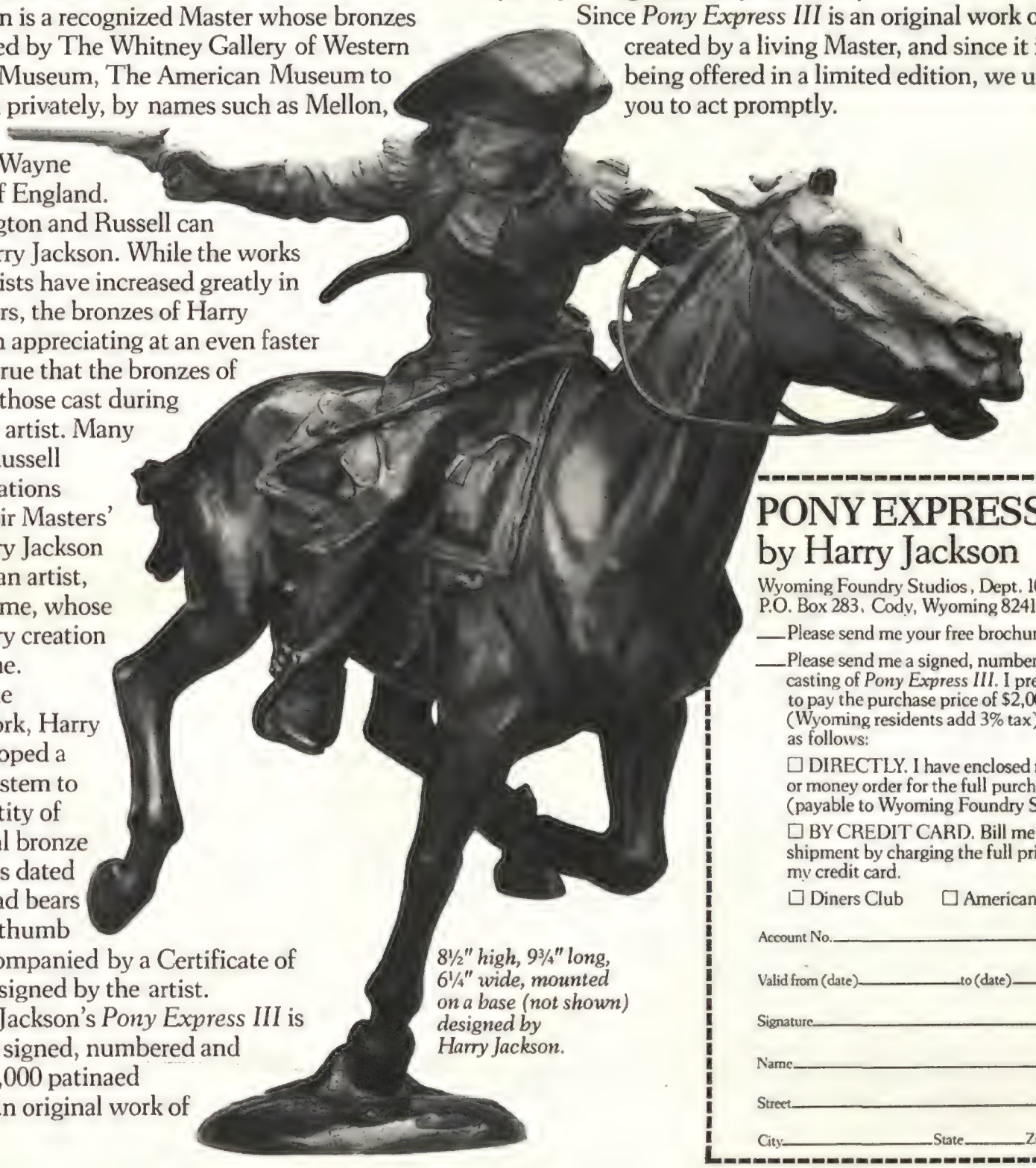
Only Remington and Russell can compare with Harry Jackson. While the works of these earlier artists have increased greatly in value over the years, the bronzes of Harry Jackson have been appreciating at an even faster rate. For it holds true that the bronzes of greatest value are those cast during the lifetime of the artist. Many Remington and Russell castings are generations removed from their Masters' hands, while Harry Jackson is a living American artist, working in his prime, whose hand touches every creation that bears his name.

To protect the integrity of his work, Harry Jackson has developed a comprehensive system to establish the identity of each of his original bronze sculptures. Each is dated and numbered, and bears his signature and thumb print. Each is accompanied by a Certificate of Origin personally signed by the artist.

Now, Harry Jackson's *Pony Express III* is being offered in a signed, numbered and dated edition of 1,000 patinaed bronzes. Each is an original work of art, cast in its own separate mold. Each has an issue price of $2,000.

To reserve a casting in your name, or to obtain a free brochure describing Harry Jackson and the creation of *Pony Express III,* fill out and mail the coupon below to: Wyoming Foundry Studios, Department 102, P.O. Box 283, Cody, Wyoming 82414. Or call us in Cody, toll-free, at 800-443-4905. (In Wyoming, call Cody 587-5508)

Since *Pony Express III* is an original work of art created by a living Master, and since it is being offered in a limited edition, we urge you to act promptly.



8½" high, 9¾" long, 6¼" wide, mounted on a base (not shown) designed by Harry Jackson.

PONY EXPRESS III by Harry Jackson

Wyoming Foundry Studios, Dept. 102,
P.O. Box 283, Cody, Wyoming 82414

___Please send me your free brochure.

___Please send me a signed, numbered casting of *Pony Express III.* I prefer to pay the purchase price of $2,000 (Wyoming residents add 3% tax) as follows:

☐ DIRECTLY. I have enclosed my check or money order for the full purchase price (payable to Wyoming Foundry Studios).

☐ BY CREDIT CARD. Bill me after shipment by charging the full price to my credit card.

☐ Diners Club ☐ American Express

Account No._____

Valid from (date)_____ to (date)_____

Signature_____

Name_____

Street_____

City_____ State_____ Zip_____

Alaska • Canada

Discover the Last Frontier this Summer on a Princess Cruise.

See Alaska at its best on one of three British-registered *Love Boats.* You'll glide along the protected Inside Passage. An endless panorama.

Enjoy dazzling entertainment. Superb service. And award-winning cuisine served by Italian dining room captains.

Sail round trip from Vancouver for 7 or 8 days of leisure luxury. In 7 days, cruise to Glacier Bay, Juneau, Skagway and Sitka. In 8 days, you'll see Ketchikan, too.

Or choose a Bonanza cruise and sail 12 days round trip from San Francisco or 14 days from Los Angeles. See Glacier Bay and 6 ports in Canada and Alaska. Ask about our money-saving Bonanza programs.

Call a travel agent, the expert.

Princess Cruises, 2020 Avenue of the Stars, Los Angeles, CA 90067
Please send brochures on: ☐ Alaska/Canada ☐ Transcanal
☐ Acapulco 7-Day Sailaway ☐ Caribbean 7-Day Sailaway ☐ South Pacific

SI-1-79

Name

Address/City/State/Zip

My Travel Agent/City

Princess Cruises
PART OF THE GROWING WORLD OF P&O

Marco. The tropical island with only one hotel.

Marco. It's a world apart.
But not a world away.
A tropical island. With one hotel, commanding three-and-a-half miles of white beach, and sea-polished shells, and the blue-green Gulf of Mexico.
A place to indulge yourself with golf, tennis, fishing, sailing, and all the idle pleasures of the world.
Or, to wander off barefoot and satisfy your spirit with a sense of splendid isolation.
For brochures or reservations, see your travel agent.
Or call toll-free: 800-237-7509.
In Florida: 813-394-2511.

Marco
BEACH HOTEL & VILLAS

Marco Beach Hotel and Villas, Dept. SM., Marco Island, Fla. 33937.

Photograph © 1978 by Jill Krementz

Margaret Mead, teaching at Columbia

heroes left the family of mankind which, indeed, had been the subject this hero of mine had spent the better part of 76 years thinking about. I've encountered few heroes in any life—they are after all, special . . . and personal. One was a curmudgeonly naturalist with a heart of mush named Marston Bates. Another was Hamilton Gibson, the headmaster of a school in New England long before I met him and a wonderful storyteller in retirement. He was also something of a naturalist and tried to teach me to sit still in the presence of chipmunks. Another was Margaret Mead.

Like millions of others, I read her stuff. Like thousands, I knew her a little bit—for a few fleeting wondrous moments while hanging around the American Museum of Natural History where *she* hung out when home. She broke all the rules of her academic discipline by going public, in order to prepare anyone who would listen to think about the nature of mankind and what we do, usually blindly, to and for each other.

She had, quite simply, the most humane and tough mind around.

I haven't the faintest idea how the discipline of anthropology plans to produce another such benison for us all, but I wish it would hurry up because I feel lonely.

—James K. Page jr.

The first three minutes of the universe…the secret life of animals…mysteries of the Mexican pyramids…mind and supermind—

Sooner or later all the secrets of the natural world are revealed to the members of the

Natural Science Book Club

55080. IMPROVING ON NATURE: The Brave New World of Genetic Engineering. *Robert Cooke.* Timely report on science's continuing attempts to reorder life's formulas in a war against hunger, disease, and want. Down-to-earth discussions of techniques, developments and arguments for and against future research. **$12.50**

82771-2. TEMPLES, TOMBS AND HIEROGLYPHS/RED LAND, BLACK LAND. An excellent introduction to the complex and fascinating subject of Egyptian history, plus an absorbing look at the customs and habits of everyday life in ancient Egypt. *Counts as 2 of your 3 books.* **$25.90**

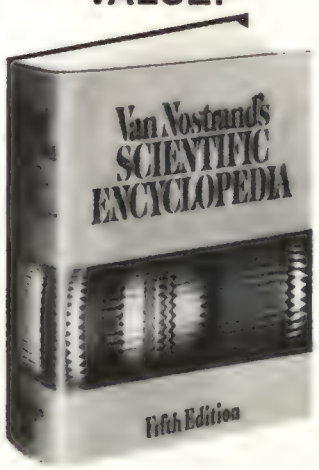
74230. THE RIVER CONGO. *Peter Forbath.* The discovery, exploration, and exploitation of the world's most spectacular river. **$15.00**

48715. THE FOOD CRISIS IN PREHISTORY. *Mark Nathan Cohen.* The exciting story of the surprisingly sudden and universal economic transition from hunting and gathering society to agricultural man ten thousand years ago—with cogent explanations of how population pressure triggered that transition. **$15.00**

36655. THE BOOK OF THE DEAD. Decoding of the ancient Egyptian book, showing the hieroglyphics and translation. **$12.50**

37211-2. THE CAMBRIDGE ENCYCLOPAEDIA OF ASTRONOMY. Huge work covers everything from the life and death cycles of the stars to the origin and fate of the cosmos. Beautifully illustrated. *Counts as 2 of your 3 books.* **$35.00**

EXTRAORDINARY VALUE!



00470-3 VAN NOSTRAND'S SCIENTIFIC ENCYCLOPEDIA. *Edited by Douglas M. Considine.* Nearly 200 experts have contributed to the thoroughly revised and expanded Fifth Edition of the most authoritative single-volume source of scientific information ever assembled. Over 2,500 illustrations. *Counts as 3 of your 3 books.* **$67.50**

Take any 3 books (values to $67.50) for only 99¢ each

if you will join now for a trial period and agree to take 3 more books—at handsome discounts—over the next 12 months

54240. HUNTING FOR DINOSAURS. *Zofia Kielan-Jaworowska.* The three-year effort to find and decipher the meaning of the ancient bones that litter the Gobi desert. Crammed with fascinating descriptions of dinosaurs and their evolution. **$12.00**

44930-2. THE ENCYCLOPAEDIA OF IGNORANCE. *Edited by Duncan and Weston-Smith.* Fascinating encyclopedic exploration of the frontiers of scientific research. 58 internationally renowned scientists highlight topics ranging from evolution to black holes. *Counts as 2 of your 3 books.* **$30.00**

62700. MIND AND SUPERMIND. *Edited by Albert Rosenfeld.* Reports on the mechanism of memory, pacemakers for the brain, therapeutic use of megavitamins, and much more. **$8.95**

35506. BACKPACKING EQUIPMENT BUYER'S GUIDE/WALKING SOFTLY IN THE WILDERNESS/SIMPLE FOODS FOR THE PACK. 256 pages of expert field-tested consumer information on hundreds of items: packs, tents, sleeping bags, boots, and more. *Plus,* a first-rate wilderness guide that helps you do everything from selecting a pack to reading a map, and finally, an indispensable camp cook's companion filled with dozens of quick, easy, and light meals for the trail. *The 3 count as one book.* **$19.85**

87890-2. WORLD PREHISTORY IN NEW PERSPECTIVE. *Grahame Clark.* Tour of man's pivotal rise from the stone age to the dawn of civilization. Examines Egyptians, Mayas, Babylonians, Hittites and many others. *Counts as 2 of your 3 books.* **$29.95**

55547. INSIDE THE ANIMAL WORLD: An Encyclopedia of Animal Behavior. *Maurice & Robert Burton.* An elegantly illustrated, comprehensive survey of every facet of animal activity, from mating rituals to communication. **$17.50**

63350. MYSTERIES OF THE MEXICAN PYRAMIDS. *Peter Tompkins.* Stunning array of 500 photos, drawings and maps illustrates the fascinating Mesoamerican pyramids, which have mystified archaeologists and laymen for centuries. **$20.00**

63340-2. MYSTERIES OF THE PAST. *Edited by Joseph H. Thorndike, Jr.* Who first crossed the oceans? Did the Greeks have a computer 2000 years ago? Who build Stonehenge and why? These and other fascinating questions are explored in this fully illustrated look at how science is solving ancient enigmas. *Counts as 2 of your 3 books.* **$34.95**

77570. THE SECRET OF ATLANTIS. *Otto Muck.* A dramatic re-creation of the life and death of Atlantis, which as Muck postulates, was destroyed in the course of a single day by a cosmic explosion of unparalleled proportions. **$12.50**

67760-2. PEOPLE OF THE FIRST MAN. *Edited by David Thomas and Karen Ronnefeldt. Watercolors by Karl Bodmer.* Life among the Plains Indians in their final days of glory. *Counts as 2 of your 3 books.* **$30.00**

34210. THE ARCHAEOLOGY OF NORTH AMERICA. *Dean Snow.* Prehistoric Indian cultures, from the first crossings into this continent to the 20th century. 195 photos, charts and maps. **$18.95**

34730. THE ATLAS OF EARLY MAN. *Jacquetta Hawkes.* A panoramic overview of concurrent events in history through charts, graphs, and illustrations, from pre-history to the Roman Empire. **$20.00**

34910-2. THE AUDUBON SOCIETY BOOK OF WILD BIRDS. *Les Lin and Franklin Russell.* A dazzling word and picture celebration of birds. 200 full-color photos by the world's best bird photographers. *Counts as 2 of your 3 books.* **$37.50**

48601. THE FIRST THREE MINUTES/THE COLLAPSING UNIVERSE. Fascinating tour of the universe through its expansion and evolution. *Plus,* the investigation of the most mystifying of astronomical phenomena—the black hole. *The 2 count as one book.* **$17.90**

48475. FIELDBOOK OF NATURAL HISTORY. *E. Laurence Palmer and Seymour Fowler.* The most authoritative and comprehensive guide to natural history available. With over 800 illustrations. **$17.50**

52135-2. HAMMOND WORLD ATLAS COLLECTOR'S EDITION. Contains 442 beautiful maps. Huge edition filled with full-color maps and illustrations. *Count as 2 of your 3 books.* **$24.95**

61591. MAWSON'S WILL/SECOND CHANCE. The unforgettable epic of explorer Douglas Mawson's incredible battle for survival in the Antarctic. Plus, an enchanting narrative of a sailing voyage around South America. *The 2 count as one book.* **$22.90**

61100. MATH PUZZLES AND GAMES. *Michael Holt.* More than 300 mind-boggling brain-teasers. Fully illustrated. **$13.95**

73939. THE RESTLESS UNIVERSE/WHITNEY STAR FINDER. A highly acclaimed 450 page tour of the ideas, principles, and process of modern astronomy. *Plus* a top notch field guide to the night sky shows you how to locate and observe stars, planets, comets and eclipses. **$21.90**

36395. BLACK HOLES, QUASARS AND THE UNIVERSE. *Henry L. Shipman.* An absorbing exploration of the frontiers of astronomy. **$14.50**

(Publishers' Prices shown)

If the reply card has been removed, please write to
Natural Science Book Club
Dept. 4-A5C, Riverside, N.J. 08370
to obtain membership informaton and an application.

Around the Mall and beyond

ISIS, the di Suvero scrap-iron sculpture that I started to write about in September, has now been painted, which indicates that it is completed. I went around to the Mall side of the Hirshhorn to look at it once more before it becomes an everyday feature of the area, a Smithsonian appendage to be passed every day, looked upon with growing familiarity and finally with that same blandness with which we Smithsonian staff people regard the Wright brothers' plane, the world's largest African elephant, the Fort McHenry flag, the pandas and the sarcophagus of James Smithson himself.

ISIS is an extraordinary piece of work, surely one of the mightiest gifts ever to the Institution, and surely one for which we can never adequately express our gratitude to the Institute of Scrap Iron and Steel ("*ISIS*," get it?) who donated it.

Coming close to it, I discovered one thing I had not known before: it's really a giant mobile. The whole front section is suspended free of the great I-beam "legs." I leaned my puny weight on it and it swung, grudgingly, ponderously, but enough to make its little bow—to Mark di Suvero, to the Institute which donated it, to the Institution which accepted it, and finally to me, who pushed it.

Freshly painted, *ISIS* stands outside Hirshhorn.

Four books produced by Smithsonian people arrived in my office recently and deserve some words. The first is a children's book, *The Spotted Stones* by Silvio Bedini, deputy director of the Museum of History and Technology. It charmingly fictionalizes the origin of the game of dominoes, attributing it to the inventiveness of two monks unjustly incarcerated during a pilgrimage in Italy. Nonsense, of course, as Mr. Bedini's historical note points out, but very good fun, with fine pen-and-ink illustrations by Richard Erdoes. Back in May 1973, this magazine ran an article by Erdoes about his life among the Indians (he calls himself "a paleface Viennese Sioux"), and his artwork reflects the same humor that percolated through his writing. Silvio Bedini, of course, we know from his writings and book reviews in these pages.

Smithsonian Exposition Books, which turned out *The Smithsonian Experience* in 1977, now offers two more richly illustrated, informative productions.

The Magnificent Foragers is about the fieldwork carried on by scientists of the Museum of Natural History from the turn of the century to today, and from the Himalayas to the coral reef of Carrie Bow Cay, off Central America. The brightly illustrated book is rich in the adventures and anecdotes of our field scientists. You don't have to be an invertebrate zoologist, volcanologist or archaeologist to enjoy every page.

The other offering is *The Smithsonian Book of Invention*. Though I say so who shouldn't—since I did a chapter of it—this is a beauty, and fun, too. Don't look for big treatises on Edison and Firestone and Westinghouse. Look instead for the beginnings of everyday things, even the mere ideas that started us off on ways we now live (SMITHSONIAN, October 1978).

Finally, from the Smithsonian Institution Press comes a slim little abstract in the "Studies in Air and Space" series; this one, by my old friend Claudia Oakes of the National Air and Space Museum, is called *United States Women in Aviation Through World War I*, and I love it. I love the photograph of Miss E. Lillian Todd, aircraft designer, perched at the wheel of an early plane, wearing a flowered hat, a dress that falls to the soles of her high-button boots and the same look that your third-grade teacher wore when she led the singing of "Santa Lucia."

I also love "Tiny" Broadwick wearing an impish grin which was notably absent when she tumbled from the wing of a plane in 1913 to become the first American woman to do so—with a parachute. And I am enamored of Harriet Quimby in her satin flying suit, Matilde Moisant in her tweed creation and Marjorie Stinson in her middy top.

Claudia Oakes is curator of the Wright brothers exhibit which I mentioned last month. I asked her if anyone knew anything about those bicycles the Wrights made before they took up planes. Claudia

Introducing the Jeep Wagoneer *Limited* The ultimate in 4-wheel drive

Built for those who demand nothing but the best in 4-wheel drive performance without compromising on luxury. Like all Wagoneers, the Limited handles bad weather and off-road obstacles as easily as it travels pavement. But now in unparalleled comfort and luxury. The seats are of real leather. The spacious and luxurious interior surrounds you with extra thick carpeting. Handsome woodgrain trim inside and out. AM/FM radio with your choice of CB or stereo tape deck. And of course, Quadra Trac,® Jeep's exclusive automatic 4-wheel drive. Automatic transmission, power steering, power front disc brakes and formidable 360 V-8 engine—all standard to make this the most unique and comfortable Jeep Wagoneer ever.

Jeep Corporation, a subsidiary of American Motors Corp.

Fleet and leasing plans available. See your Jeep dealer for details.

Jeep®

We wrote the book on 4-wheel drive

Send for our free catalog featuring classic fashions from dresses to sportswear to menswear.

Name _____

Street _____

City _____

State _____ Zip _____

Dept. LA, Hingham, Massachusetts, 02043
10 stores in Massachusetts and Connecticut

Dandelion Puff

The illusive dandelion, timelessly preserved in a crystal clear cube of acrylic. One of nature's wonders of design to be an object of decoration, or as a paperweight. A 2½" cube. $11.50 postpaid, plus applicable tax for delivery in California, New Jersey and New York.

Send for our New 80-page Gift Book. $1 each.

GUMP'S

250 Post • San Francisco, CA 94108
Dept. 351
TOLL FREE 800-227-4512
(In Calif. 800-652-1662)
AEX, DC, MC, VISA

ENJOY THE
CARTAN EXPERIENCE

IN SOUTH OR CENTRAL AMERICA
It's all the Latin America you've dreamed and saved for.

Explore the past, present and future with a trained escort to guide you past barriers of language and custom. Legendary sights—Rio, Buenos Aires, Lima. Machu Picchu, lost in Andean mists for centuries. 21st century Brasilia. Or Mayan archeological sites. A vacation you'll never forget!

See your travel agent, or mail this coupon for colorful free brochure(s) on: SM179
☐ South/Central America ☐ Hawaii ☐ Mexico ☐ Europe ☐ Orient ☐ U.S. ☐ Canada

Name _____
Address _____
City _____ State _____ Zip _____
My Travel Agent's Name _____
SM179

An affiliated AVCO company
One Crossroads of Commerce, Rolling Meadows, IL 60008

Cartan Tours

referred me to Wright-expert Charles Gibbs-Smith, who says that the brothers made three models. The Wright Special was a cheapie for the student trade; the St. Clair was a medium-class job; the Van Cleve was a superduper which did everything but fly. If you find a Wright Van Cleve up in your attic, you've really got something.

The National Portrait Gallery is embracing history. A recent symposium over there consisted of the lectures by four leading biographers on their art: Leon Edel, using his Pulitzer prizewinning work on Henry James as the example with which to bolster his ideas; then Doris Kearns, doing the same with Lyndon Johnson. That was the first day. On the next, Justin Kaplan, another Pulitzer prizewinner (*Mr. Clemens and Mark Twain*), led off, talking more about his new book on Walt Whitman. And, finally, Barbara Tuchman wrapped up the discussion, referring to her book about General Stilwell, which got a Pulitzer (as did *The Guns of August* which, of course, isn't a biography).

I could have listened to all of them for two weeks instead of two days, and I was bothered by how little reading I've come to do except in line of duty. This New Year's resolution is to stop goofing off during spare time, and read.

For this, as I indicated, I have to thank the National Portrait Gallery, with its turn toward history. It has always bowed in that direction, come to think of it. Look at "Facing the Light," a choice exhibit of 110 American daguerreotypes. They're beautifully presented in small, low-lit rooms, the little portraits of 19th-century notables staring rather self-consciously out at you from the actual cases in which they have always resided. Here, as is so often the way at the Smithsonian, music helps set the stage. It's Stephen Foster, softly piped into the display rooms. For me, at least, it is magical.

The symposium was held in the Great Hall of the Gallery, on the third floor. The Portrait Gallery and the National Collection of Fine Arts share the old Patent Office Building, a splendid government structure which was turned into a hospital during the Civil War. In fact, the story goes that when it was being refurbished for Smithsonian use, back in the 1960s, some intriguing items were found down in the basement: a pair of

The Working Trees: Class of 2020.

By the time the seedlings in our tree nursery become productive "working trees," America will require more than twice the wood fiber it does today.

Since doubling our land resource is virtually impossible, Potlatch has turned to other means to satisfy future demand.

One of the ways we plan to increase yields is through genetically-improved trees.

Many seedlings in our nursery originate from "parents" significantly superior in certain desirable characteristics. Such traits can be combined and enhanced through testing and crossbreeding.

Our objective is to develop trees with better growth rates, fiber quality and insect and disease resistance.

A better class of working trees will help us get the most out of the land under our productive control.

Potlatch Corporation, Public Information Office, P.O. Box 3591, San Francisco, CA 94119.

Potlatch

The Icelandic Poncho

one size fits all!

THE EMBRACEABLE EWE! Versatile, unusual and beautiful: the snuggly warm 100% wool poncho imported from Iceland. Rich, undyed brown and gray stripings on natural white background. This thermal brushed knit is lightweight, naturally water repellent...and gorgeous! $85 Ppd. Wear with one-size Icelandic mittens $14. Order this ideal gift for yourself and everyone you love! Check, VISA, M/C, AmEx. Hurry, use coupon below or phone now **Toll Free 800/257-9445; NJ Res. 800/792-8333** or visit our stores in Manchester VT. & Princeton NJ. Call for our **free, full-color men's & women's Catalog with pure wool swatch,** photographed in cooperation with Icelandic/Loftleidir Airlines.

LANDAU PRINCETON, N.J.

We recommend Woolite®

Call Toll Free or Send This Coupon
LANDAU, Dept. 81, 114 Nassau St.
Princeton, NJ 08540
Please rush me (Satisfaction Guaranteed):
___**Ponchos** @ $85. ___**Mittens** @ $14.
☐ Check/M.O. ☐ AmEx. ☐ M/C ☐ VISA

Card No. Expiration Date

Name

Street

City State Zip

☐ Please send new **FREE FULL COLOR Men's & Women's WOOL CATALOG** & visit our stores in Manchester VT/Princeton NJ.

Victorian charmer!

Identical to the antique original—elegantly embellished, English-made by famed Old Foley! Antique white glazed earthenware, strawberry-strewn, nostalgic for the table or the collector's shelf. Our own import from James Kent—7½" high, holds 1 quart, dishwasher-safe.
9837 Victorian Pitcher $13.98

Add $1.35 post. & hdlg. NY res. add taxes. Master Charge or Visa: send account number, exp. date, Master Charge Interbank number.

LILLIAN VERNON®

Dept. T13, 510 S. Fulton Ave.
Mt. Vernon, NY 10550

Scandinavia

North Cape • Lapland • Russia

In depth . . . and leisurely with Four Winds

Unhurried lifeseeing with a choice of twelve deluxe escorted tours, 15 to 22 days. See four Scandinavian countries and Norway's fjords...cruise the Baltic Sea and enjoy Moscow and Leningrad... take first-class scenic railcruise through the land of the Vikings...have the time of your life aboard a 14-day Royal Viking North Cape cruise, plus Scandinavia...All that and you can see Eastern Europe too!

20 Years of quality and reliability

Leave it to Four Winds to provide you with the best of everything • Deluxe hotels • Most meals included • Small groups • Fully escorted • All tips, transfers & baggage handling • Lowest group air fares via SAS from New York, Chicago and Los Angeles • Money-saving departures, April, May, September & Oct.

- **Skandia Highlights**
- **Midnight Sun Railcruise**
- **Skandia/Alpine Fantasy**
- **Skandia/British Isles**
- **Skandia/Russia/Eastern Europe**
- **Skandia/North Cape/Lapland**
- **Skandia/North Cape Cruise**
- **Viking Waterways—Russia/Finland**

Four Winds®

175 Fifth Avenue, New York, N.Y. 10010
Phone: 212-777-0260 Dept. M306-S
Please send me your full-color brochure describing your Scandinavian vacations

Name

Address

City State Zip

Union Army boots, other bits of military clothing, and, finally, some graffiti.

Downstairs in the National Collection is a remarkable exhibit which you have about a week to see. It's called "Alan Sonfist/Trees"—and if *that* name draws a blank, pull up your chair for a moment.

Alan Sonfist is the guy who's making a forest in the middle of Manhattan. OK? He was allowed to use a patch of idle turf where a new avenue had been planned, then rejected, in Greenwich Village, and he's planting it with grasses, weeds, wild flowers, herbs, bushes, seedlings, saplings and trees—and when that's done, there will be a street-shaped plot that will look much as the island looked when Peter Minuit built 30 houses there in 1626.

Another exhibit which is about to close is "Ornament in the 20th Century" at the Cooper-Hewitt in New York. Here is the Beatles' Rolls-Royce in all its glory, as photographed in last September's column, and beside it a display of photographs of the front grilles of American cars—two Cadillacs, a Buick, a Studebaker, an Edsel, a Pontiac and a heart-shaped radiator that baffles me—all from another book (which I'll now read): *American Grilles* by Steven Salmieri.

There are many other items of everyday use, some lavishly artistic, some rather humdrum, but proving the point that design is part of our lives. There is, for example, an extravagant dinner service dating from the turn of the century, and not far away is a set of fitted plastic dishes that some friends use in their sailboat.

While we're on art and design, another friend wrote that she was determined to find the fossil of the orthocone nautaloid cephalopod ("Mall," October) in the floor of the National Gallery, but had I noticed the profile of Lorenzo de' Medici? And then she wouldn't tell me any more, so I had to go and look for myself.

Well, Lorenzo, a statue, is cunningly concealed in that great building, but I finally tracked him down—a fine sculpture by Andrea Verrocchio. And I looked at him in profile, as I was told to do, and there was Richard M. Nixon—less jowly, but with that unmistakable nose.

Then I walked over to look at Lorenzo's brother and companion, Giuliano. *His* profile looks like Henry Kissinger's.

—Edwards Park

Sail with Calypso!
Dive with Cousteau!

- See man's attempts throughout history to breathe under water—from Alexander the Great's descent in a wooden bucket...to fanciful 16th century diving bells...to the Cousteau-Gagnan aqualung.

- Learn why divers have recovered only a perfume bottle and 4 silver plates from the "Andrea Doria," although she reportedly sank with $4 million in cash and jewels.

- Descend 32,000 feet and see the bizarre forms of life that inhabit the dark and frigid "hadal zone."

- Discover what unique traits make women superior divers—and how their natural advantages have been exploited by the ama divers of Japan and the Yahgen Indians of Tierra del Fuego.

- over 200 full-color photographs
- 8½" x 11" durable, soil-resistant covers
- 144 pages in each
- 21 handsome, hardcover volumes

Accept Volume I FREE as your introduction to THE OCEAN WORLD OF JACQUES COUSTEAU

The world's most famous undersea explorer, Jacques Cousteau, invites you to journey with him into waters no one has ever before dared to enter, and dive to depths once thought impossible. The skipper whose Aqualung, Diving Saucers, and Conshelfs have turned men into oceanauts shows you the once-secret world these inventions have unlocked, a world teeming with life, challenge and excitement—beautiful and bizarre marine creatures ...incredible undersea formations and plant life...wrecks almost totally picked clean of their treasures.

In *The Ocean World of Jacques Cousteau,* you'll be captivated by the same intriguing blend of knowledge, personal warmth, and narrative skill—the same bold and original views that make his films and television specials so memorable. Filled with thousands of spectacular color photographs and scientific discoveries, these volumes are the extraordinary results of Captain Cousteau's thousands of diving hours, and years of undersea detective work.

In your free introductory volume, you'll experience all the excitement of the world Cousteau knows and loves best—from the primitive nautilus, unchanged after millions of years...to the complex and intelligent dolphin, a creature we're already communicating with in astonishing ways. You'll follow the clues that reveal our past—and learn how the myriad wonders of the sea are the key to our future survival.

Simply mail the coupon and you'll soon be enjoying your free introduction to *The Ocean World of Jacques Cousteau.*

"Our children need the ocean to survive"

A message to you from Jacques Cousteau...

If the Oceans of Earth should die—it would be the final catastrophe in the story of man and of all life on this planet...maybe fifty years later the last man on earth would take his own last breath. Why imagine such a nightmare about the subject I love most? Because the Ocean *can* die—and we must make sure that it doesn't. Man exists only because Earth is a "water planet"—liquid water being probably as rare in the universe as life, perhaps even synonymous with life. The Ocean *is* life. This is why we must change our attitude toward the Ocean. We must regard it as no longer a mystery, a menace, a dark and sinister abode of secrets and wonders. Instead we want to explore how it moves and breathes, how it experiences dramas and seasons, how it nourishes its hosts of living things, how it harmonizes the physical and biological rhythms of the whole earth, what hurts it and what feeds it—not least of all, what are its stories.

The Ocean World of Jacques Cousteau, Dept. YB
Sherman Turnpike, Danbury, Connecticut 06816

This order form entitles you to receive—as a FREE GIFT—Volume 1 of the 21-volume illustrated series, *The Ocean World of Jacques Cousteau,* with no obligation to buy anything. As a subscriber you will be notified in advance of all future shipments and you may reject any shipment or cancel your subscription simply by notifying us before the shipment date indicated on the invoice accompanying your advance shipment notice. (This procedure is designed to provide time for mail delivery and computer processing.) Also, if not completely delighted with any volume after Free examination in your home, you may return it at our expense and owe nothing.

If we do not hear from you after you have received your FREE volume, we will send you Volume 2 in six weeks, then Volume 3 six weeks after Volume 2, and all the remaining volumes six weeks after that. Those volumes you decide to keep will become a permanent part of your home library, and you will be billed for only 1 volume per month until they are paid for at the amazingly low price of only $7.98 per volume plus shipping and handling.

As a subscriber you will also be entitled to receive, for FREE examination, any annuals that are issued. You may purchase only those you wish to own.

Remember, you are free to cancel at any time after taking as many or as few volumes as you like—even none at all if you so choose. Volume 1 is yours to keep ABSOLUTELY FREE no matter what you decide.

Name_____

Address_____ Apt. = _____

City_____ State_____ Zip_____

Signature_____

If under 21, please have parent or guardian sign. Available in Canada. Shipment and services from Canada

97376

executive health

the report that briefs you on what to watch

©WORLD COPYRIGHT RESERVED 1978 BY EXECUTIVE HEALTH PUBLICATIONS

Volume XV, Number 3 • December, 1978 • Pickfair Bldg., Rancho Santa Fe, Calif. 92067 • Area 714:756-2600

New research findings . . .

ON ZINC . . . the amazing metal so *essential* to your health

Deficiency of it can cause endless problems many of them just now being realized

Almost half of all men at some point can expect a bit or a lot of prostate trouble. But if a group of Chicago investigators are right, much of it might be avoided by attention to the role of a metal, zinc, in prostate health. With zinc, the investigators report, they have been able to overcome inflammation and even enlargement of the prostate in many men.

It may seem a far cry from prostate disorders to some queer problems of taste and smell — no taste or smell at all or disturbing perversions of one or both. Yet zinc of late has been used with considerable success in overcoming such problems.

And these are just two of a considerable array of recent developments in the emerging story of the metal in human health and disease. It now appears that zinc may have notable potential for helping to overcome a wide variety of problems — ranging from slow wound healing to serious blood vessel disorders including atherosclerosis or "artery-choking," from proneness to infections to infertility, and from retarded growth and sexual maturation to a life-threatening skin rash.

Studies suggest that the metal, although common in many foods and long supposed to be in adequate supply, can be, for one reason or another, deficient in many people and, in fact, is to a surprising degree.

Zinc is one of a group of what are called trace metals, found in the human body in only tiny amounts, as little understood for the most part now as were vitamins 75 years ago, yet vital. Iodine is one: copper, another: chromium (See Executive Health, Vol. XI, No. 5) still another; and there are more.

Their combined weight in the body amounts to no more than an ounce. Yet, in their minute quantities, they play vital roles. The total of iodine in the body, for example, amounts to 30 milligrams (and a milligram is only one thirty-thousandths of an ounce). But

EDITORIAL BOARD

SIR HANS KREBS, M.D., F.R.C.P. (England), *Nobel Laureate in Physiology and Medicine. Emeritus Professor of Biochemistry, Oxford University, Metabolic Research Laboratory, Nuffield Department of Clinical Medicine, Radcliffe Infirmary, Oxford, England.*

RICHARD L. BOHANNON, M.D., F.A.C.P., *Lieutenant-General, United States Air Force (Ret.); Medical Director, The Institute for Aerobics Research, Dallas, Texas.*

JAMES F. TOOLE, M.D., F.A.C.P., *The Walter C. Teagle Professor of Neurology, Bowman Gray School of Medicine, Wake Forest University, Winston-Salem, North Carolina.*

LEONARD HAYFLICK, Ph.D., *Senior Research Cell Biologist, Children's Hospital Medical Center, Bruce Lyon Memorial Research Laboratory, Oakland, California.*

DEMETRIO SODI-PALLARES, M.D., *Professor of Medicine, Chief of the Department of Electro-Vectorcardiography, Institute Nacional de Cardiologia, Mexico, D.F.*

ALBERT SZENT-GYORGYI, M.D., Ph.D., *Nobel Laureate for Physiology and Medicine, Scientific Director, The National Foundation for Cancer Research, Woods Hole, Massachusetts.*

JOHN K. LATTIMER, M.D., ScD., FACS, *Professor and Chairman, Department of Urology, College of Physicians and Surgeons, Columbia University; Director, Squier Urological Clinic and Director, Urological Service, Presbyterian Hospital, New York City.*

JOHN STIRLING MEYER, M.D., *Professor, Department of Neurology, Baylor College of Medicine; Director, Baylor-Methodist Center for Cerebrovascular Disease, Texas Medical Center, Houston, Texas.*

SOLON PALMER, Jr., M.D., *Scripps Clinic and Research Foundation, La Jolla, California.*

HANS SELYE, C.C., M.D., Ph.D., D.Sc., F.R.S. (C), *President, International Institute of Stress, University of Montreal, Montreal, Quebec, Canada.*

LINUS PAULING, Ph.D., *Nobel Laureate in Chemistry and in Peace; Emeritus Professor of Chemistry, Stanford University, Stanford, California. Research Professor, Linus Pauling Institute of Science and Medicine, Menlo Park, California.*

MARK D. ALTSCHULE, M.D., *Visiting Professor of Medicine, Harvard Medical School; Lecturer in Medicine, Yale University; Staff Consultant, Boston City Hospital; Attending Physician, Boston Veterans Administration Hospital, Boston, Massachusetts.*

ALTON OCHSNER, M.D., *Senior Consultant in Surgery, Ochsner Clinic and Ochsner Foundation Hospital and Emeritus Professor of Surgery, Tulane University School of Medicine, New Orleans, Louisiana.*

ROGER J. WILLIAMS, Ph.D., D.Sc., *Professor of Chemistry, Co-founder and Consultant, Clayton Foundation Biochemical Institute, The University of Texas; Past President, The American Chemical Society, Austin, Texas.*

THE TRUTH THAT SHOCKS

too many executives too late!

Only the fit survive. Ignorance about how to take care of yourself can be the mistake that kills you in your 50's or 60's . . . like an ordinary man. But as an executive you are not an ordinary man. *Put your brains to use.* Discover what research scientists now know about how to take the best care you can of the only body you will ever have.

Remember this! The errors of our younger years, are drafts upon our older years, payable (with interest) some 30 years from date.

The so-called "diseases of old age" are essentially the diseases of 50 to 70 . . . **"the dangerous years!"**

Research scientists find that people who survive these "dangerous years" **successfully** (without acquiring some "chronic" disease such as cancer or heart trouble) are likely to live on for another **healthy** quarter of a century. They seem to have developed what might almost be called an **immunity** to these killers. Why? To find out, some careful studies have now been made of these longlived individuals.

May we suggest that you get the benefit of these new research studies for yourself? Do as so many thousands of executives do. Subscribe to Executive Health Report. The members of our **Editorial Board** are among the world's most distinguished authorities on preventive medicine. Their wise advice can help you not only live longer but enjoy those extra years! (Note their high qualifications as shown on opposite page.)

Executive Health Report is not sold on newsstands but only by private subscription at $24 a year in the U.S.A. and its possessions, Canada and Mexico. Individual reports (back issues) $2.00 per copy. All other countries $26 by surface mail, $30 by air mail. (Only International Money Order or check cashable on U.S. bank will be acceptable.)

Subscribe now under this unusual introductory offer:

(1) Your choice of any three of the reports listed below ($2.00 each) FREE!

(2) If you are not *completely* satisfied with your first issue, your money will be *promptly* refunded.

Please study the reports listed here and circle your three choices:

New research findings On Walking . . . nature's own amazing "anti-age antibiotic"!

New research findings On Zinc . . . the amazing metal so essential to your health.

Linus Pauling, Ph.D.: For the best of health, how much vitamin C do you need? People who take the optimum amount of vitamin C may well have, at each age, only one quarter as much illness and chance of dying as those who do not take extra vitamin C.

George C. Griffith, M.D.: On those irregular heart beats (Arrhythmias). Some mean little or nothing, but others warn your heart is in trouble.

Raymond J. Shamberger, Ph.D.: On your risk of stomach cancer from untreated beef . . . and how the natural antioxidants, vitamins C and E and selenium, help protect you!

On The Syndrome Of Longevity. Key factors dependably present ("constants") in the way of life of men who have outlived other men born when they were by a generation!

Roger J. Williams, Ph.D., D.Sc.: On your startling biochemical individuality. Some amazing facts about your body you need to know if you want to understand yourself (and other people) better.

Linus Pauling, Ph.D.: On vitamin C and heart disease. Can vitamin C protect you, and how much should you take?

James F. Toole, M.D.: On Strokes and "Little Strokes" . . . their causes and what you should know about them to help protect yourself!

Sir Hans Krebs, M.D., F.R.C.S.: On the use and misuse of medication. The world-famous Nobel Laureate in Physiology and Medicine warns that too many patients are being made ill due to their own or their physicians carelessness because the new high-potency drugs have side-effects that are almost unavoidable if not carefully monitored.

Alton Ochsner, M.D.: "On the Role of Vitamins C and E in Medicine." A world-famous surgeon tells you how he uses these two essential vitamins.

John K. Lattimer, M.D., Sc.D.: On That Treacherous Gland . . . Your Prostate — as you approach 50.

John Yudkin, M.D.: On "This Slimming Business" . . . The truth about the prevention and cure of overweight!

Linus Pauling, Ph.D.: What About Vitamin E? Eminent investigators now suspect it may be one of the key factors to help resist disease and slow the aging process.

Mark D. Altschule, M.D.: Is It True What They Say About Cholesterol? Is it as dangerous as they claim?

Alton Ochsner, M.D.: On "The Chair Disease" . . . Why blood clots in your veins are a little-realized hazard.

Hans Selye, M.D.: On Stress Without Distress. Your mind can make or break you!

The B Vitamins . . . Part II. On Vitamin B_6 (Pyridoxine) "The Sleeping Giant of Nutrition."

Hardin B. Jones, Ph.D.: On The Problems Executives Must Anticipate With Marijuana Smokers. The Senior Scientist at the world-renowned Donner Laboratory of Medical Research, University of California, Berkeley, explains some dangerous, little-understood facts.

Jan Koch-Weser, M.D.: On Systolic Hypertension, more common than diastolic hypertension and at least as dangerous. What it is, what it does, and what to do about it.

Please use the coupon below under our special money-back guarantee.

EXECUTIVE HEALTH, Pickfair Bldg., Rancho Santa Fe, CA 92067

Gentlemen: Enclosed is my check for $.....for a year's subscription to Executive Health to start with this month's issue. I have circled the three $2.00 reports I am to receive free. It is understood that if I am not *completely* satisfied with my first issue, my money will be *promptly* refunded. In addition, I would appreciate your sending me a complete list of your 101 other reports because among them may be some from which I might greatly benefit and would otherwise miss.

NAME (please print)_____

ADDRESS_____

STATE/COUNTRY_____ ZIP_____ SM-6

Once caught, the zebra is roped around the neck and legs and thrown to the ground on its side. Don

Article and photographs by John Reader

The violent 'rescue' of Grévy's zebras—a controversial operation

Hunt (sleeveless shirt), the active force behind Operation Zebra, is holding the animal by one ear.

Roundup of rare animal is spectacular to observe, but the cost is high in deaths, lost foals, disrupted territories

The minibus stopped abruptly and the tourists within jostled for position to photograph the elephants spraying themselves with water. A group of waterbucks grazed the fresh grass; there were gerenuks and impalas among the acacia scrub and a turtle plopped into the pool downstream. Soon the bus stopped again while elephants crossed the road—in the Samburu Game Reserve, as in all Kenya's national parks, animals have the right-of-way—but the tourists did not

Chase car pursues a zebra at 80 kilometers per hour. The helicopter was for photography, not chase.

Sometimes a panicked animal turns into the speeding vehicle. This

object; they were in Africa to see wild animals and delightedly took more photographs. A lot of film had been exposed by the time the bus breasted the rise and the tourists noticed a plume of dust rising a kilometer or two away. They stopped again and watched as 25 Grévy's zebras wheeled in their tracks and stampeded out of sight. They were too far away for a photograph.

That evening at the lodge, a Dutch couple mentioned that they had seen three Grévy's, and a British party proudly described a fleeting glimpse of six; they were particularly pleased about this, they said, having read recently that there were only about 1,500 Grévy's zebras left in the wild. The species—not described scientifically until 1882—is named for Jules Grévy, who was president of France when his country was presented with one of the animals by the Negus of Ethiopia.

Many people in many parts of the world will have read of the plight of the Grévy's zebra at the hands of poachers. They will also have learned of Operation Zebra, a scheme whereby 100 Grévy's zebras are being caught outside the Reserve in the Samburu district and moved to the Tsavo West section of Tsavo National Park, some 300 miles away, where, the organizers claim, they will establish themselves in that foreign habitat, breed and ultimately become a viable population that will survive long after the last of the home-based Grévy's has lost its skin to the poachers.

Operation Zebra is the brainchild of Don Hunt, a freckled 46-year-old American with cool blue eyes, whose not inconsiderable fortune grew from a pet shop in Ferndale, Michigan, and expanded via the old *B'wana Don in Jungle-la* children's television series until it now embraces a travel agency, a company that establishes and manages safari parks around the world and another company that imports large mammals. The American companies are run by Don's brothers; since 1967 Don himself has made a business of catching wild animals in Kenya.

Toward the end of 1976 Hunt was legitimately persuaded that the Grévy's population had declined to a dangerous level. Apparently without seeking the advice or opinion of the extensive and knowledgeable wildlife establishment in Kenya, he and Ted Goss, then warden of Tsavo West National Park, planned and gained government approval for Operation Zebra. In the first ten months of 1977, 70 Grévy's zebras were captured on the plains near the Samburu Reserve. By November, the government had moved 50 to pens in Tsavo West. By June 1978 several had died in the pens; some were released and have not been seen since, others were killed by lions while still in holding pens. Six lions were killed (and two more wounded) by rangers charged with protecting the captive zebras. At least nine females have dropped stillborn foals. Of the 50 moved, an undetermined number survive.

Within Kenya's wildlife community, opposition to Operation Zebra has been growing steadily. Opponents say it is ill-conceived, cruelly conducted, likely to disrupt reproductive cycles severely and ultimately kill more Grévy's zebras than it saves. Furthermore, they say that poaching is just as serious in Tsavo, so

Reader, coauthor of a book on ecosystems of East Africa, Pyramids of Life (SMITHSONIAN, *November 1977), observed Operation Zebra firsthand in October and November 1977, and returned last summer.*

zebra was not seriously hurt. Critics claim chase disrupts social order.

Once the noose drops over the quarry's head, cars stop immediately and the ten-man crew rushes out.

nothing is gained even if the animals do survive the translocation. The British branch of the World Wildlife Fund raised money to help save the Grévy's zebra but, after consultation with wildlife authorities, sent none of the money to Operation Zebra. Instead, it will be used for a two-year study which is expected to show that the species can best be helped by conservation efforts right where it lives.

The magnificent Grévy's zebra—with its narrow stripes, large bat ears and a Przewalski's-horse mane (pp. 44-45)—stands apart from the common plains zebra in more than just its looks. It lives in a drier country and has evolved a social organization and behavior that are designed to cope with that harsher environment. As might be expected in areas where the food supply is sparse, Grévy's zebras have adopted a more opportunistic life-style; they do not live in family units like the plains zebras, nor do they gather in large herds.

The vulnerable members of the Grévy's populations (females, foals and subadults) migrate between pastures in accordance with seasonal rainfall patterns. Mature stallions, meanwhile, stake out individual territories of about ten square kilometers each along the migration routes and stay there all year round, ready to serve the estrous females as they pass through. It is a delicate system, somehow timed to ensure that foals are born when and where there is grass enough to produce milk in the mares. Clearly, any disturbance of either the territorial male or the breeding herds is likely to jeopardize reproduction.

Only four small areas in the whole of Samburu are flat enough for Hunt's vehicles to run down a Grévy's zebra, and all four lie along the migration routes (which also pass through the Samburu Reserve). On 150 days during 1977, Hunt went out to catch zebras in one or another of those four areas, first chasing the animals to sort out the ones he wants, then catching stallions, females, foals and even some obviously pregnant females. The ostensible reason for this disturbance is to save Grévy's from the poachers. One wonders whether, from the Grévy's point of view, there can be much choice between the two—both race at them across the plains in a cloud of dust, the poacher kills and Hunt catches, but for the Grévy's population as a whole the result is comparable: one integral part of a unique and splendid system is denied the right to play out its role.

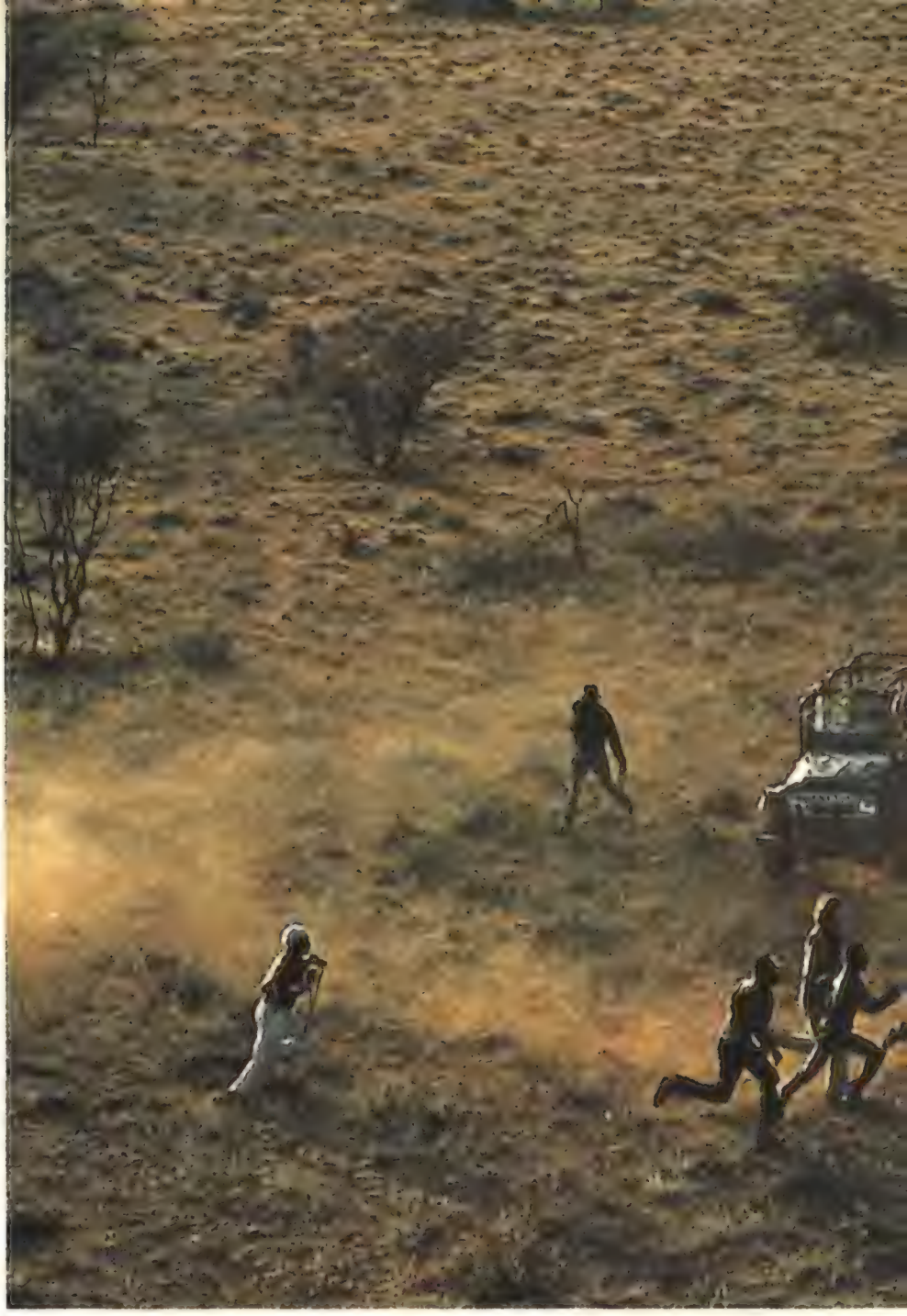
Operation Zebra is based upon the assumption that not enough Grévy's are left in the wild for survival. Their range covers the remote northern frontier district of Kenya, southern Ethiopia and parts of Somali and the Sudan—it is larger than the whole of West Germany. The total population has never been counted or even authoritatively estimated, though Hunt says that "there must have been at least 15,000 Grévy's in the old days." They were always a widely dispersed species, sometimes seen in herds of 50 or more, but usually in smaller groups. Nowadays they are less common in the accessible parts of their range. Undeniably, poaching is to blame.

But that tells us only that Grévy's have been heavily poached where it is easy to get at them. What about the rest of their range? How many are there on the vast lava fields around Marsabit, for instance, or on the fringes of the Chalbi Desert or in the badlands

bordering the eastern shores of Lake Turkana (formerly Rudolf)? These are all places where—to be profitable—poaching becomes an exercise of discouraging proportions. In these parts, maintaining vehicles, marksmen and skinners (zebras are notoriously difficult to skin) was no easy matter in the days of legal hunting; for an illegal operation today the problems are compounded.

This is not to belittle the poaching problem and its effects on the Grévy's zebra, but it is necessary to be cautious when making estimates of wild-animal numbers—it is too easy to cause alarm and, in the case of the Grévy's, a cursory examination of the evidence indicates a surviving population of far more than 1,500 animals. The Canadian-run Kenya Rangeland Ecological Monitoring Unit, for instance, suggests the total is about 13,000, with another 2,000 in the southern Sudan. This estimate, together with other data available, has led some concerned conservationists to the conclusion that the Grévy's zebra is in no way threatened with imminent extinction. Others contend that, even with a population of 15,000, the species could become extinct as early as the mid-1980s if the present rate of decline continues.

Rabbits have been translocated to Australia and feral mink have established themselves in southern England, both with devastating success. But these are exceptions rather than the rule. Moving an animal from the environment in which it evolved and expecting it to survive in another is a gamble, especially in Africa where animals are adapted to extremes of climate and terrain. The Grévy's zebra does very well indeed in its arid homeland, and the first essential in translocating it should be to discover why this is: what physiological or behavioral adaptations has it made to cope with the environment? How can these be best accommodated in the new area?



One man holds tail as the hunting crew chases the lassoed zebra. Others will grab the ears and slip

Held firmly, zebra will be pushed over and injected with tranquilizers and cortisone to combat stress.

ropes around the legs. Zebras tend to bite rather than kick, and this is a dangerous part of the chase.

Next the zebra is shoved into a rough, unpadded crate. Later it will be trucked to a nearby holding pen.

Goss was warden of Tsavo West National Park, one of Kenya's most popular parks, when Operation Zebra began (he now directs all of Kenya's antipoaching efforts). Hunt has spent a lifetime handling animals. Holding the view, apparently, that their knowledge and experience would suffice, neither of them felt it necessary or advisable to conduct research before embarking on their scheme to save the Grévy's zebra.

"Scientists would have wanted to make a long ecological study of the implications of the move," explained Hunt. "There just wasn't time for that so we relied on our own experience. We don't need scientists to tell us that zebras eat grass." Both Goss and Hunt admit to ignorance of Grévy's zebra ethology.

"I've no idea how they organize themselves," says Hunt, suggesting that the question is irrelevant because "a whole new social behavior would develop in a new environment. You are interfering with nature."

Goss says he's not sure how the Grévy's territory works, though he "would think it's the same as with other ungulates: a herd stallion together with females and young."

An earlier move succeeded

When justifying the move of the Grévy's to Tsavo West, Goss frequently refers to an earlier experiment in Tsavo East, the adjoining section of Tsavo National Park, where individuals (including mares and foals) are still seen from a group of 22 that were brought there in 1964.

Grévy's zebras were not endangered in 1964, but the late David Sheldrick, then warden of Tsavo East, suggested that because no Grévy's population existed permanently within the security of a national park, a group should be introduced to Tsavo East where the climate and vegetation approximated that of the Grévy's home range. Accordingly, 22 were released in the park. They immediately scattered over a wide area. Over the years, it became clear that a herd was building up in the south. By 1972 it comprised 14 animals, with two foals; by 1976 there were 18.

Sheldrick regarded the experiment as a qualified success; in June 1970 he reported that "Grévy's do very well in Tsavo East; small breeding groups are frequently seen," and recommended that more Grévy's should be brought in "to enable a more rapid buildup in numbers." This recommendation was not acted upon, nor was Sheldrick's advice sought on Operation Zebra before he died last year. Were he alive today, Sheldrick would probably have been more puzzled than most as to why the zebras were put in Tsavo West when they could so easily have been released in Tsavo East, in close proximity to more of their kind that had already been living there for 14 years.

Violent "help" for the Grévy's zebra

Fourteen years is also the length of time Hunt has lived in Kenya. When he "retired" there, Hunt spent the first three years big-game hunting; then he took up animal catching. Hunt describes his motivation for catching them as an overwhelming love for animals. As he sees it, the only salvation for Africa's wild animals lies in establishing and maintaining gene banks in parks and zoos around the world, and he wants to help that cause. "All animals outside the parks are practically doomed," he says.

Since he began catching professionally in 1967, Hunt has sent animals to many parts of the world. He also handles Kenya's "gifts" of animals to stock new parks in Nigeria and Ghana. (Those countries pay Hunt his costs plus ten percent. Kenya actually gives only the catching licenses worth several hundred dollars, which means that Kenya gives the animals to Hunt, who then sells them to Nigeria and Ghana.)

In partnership with his associate Iris Breidenbend, film-star William Holden and a Los Angeles lawyer, Hunt established the Mount Kenya Game Ranch in 1967 as an integral part of the catching operation. It lies on the slopes of Mount Kenya and, quite apart from serving as a temporary holding area for export animals, it also encloses resident breeding herds of various animals. Among them are 52 Grévy's zebras.

During Operation Zebra, shortage of holding pens has, on occasion, forced Hunt to mix newly caught Grévy's with his ranch herd, even when his own animals have been badly infested with the internal parasites that have become severe problems in the paddock after ten years of heavy use.

On government and national parks projects it is customary for the catcher to be paid in kind—for every animal he catches for the project he takes another for himself. In the case of Operation Zebra, Hunt explained in July 1977, the arrangement was different: one of any species *except* Grévy's for every Grévy's caught. Now, however, Hunt says this arrangement has been revoked. He implies he is doing the job for nothing beyond his deep concern for the future of the Grévy's zebra. He estimates Operation Zebra will cost him and his partners a total of $100,000.

Big-game hunting and the capture and export of live animals was banned by the Kenyan government in May 1977. But because he was already committed to the Ghanaian and Nigerian orders and already working on Operation Zebra, Hunt was granted special permission to continue.

For millions of years zebras have roamed free as the wind. They evolved the means of dealing with predators and the hazards of the environment long before Man appeared on Earth. But they cannot compete with a car, a lasso and ten men.

Lassoing a Grévy's zebra from a vehicle bouncing across the Samburu plains at 80 kilometers per hour is rather like motor racing and big-game hunting combined—with the added attractions that there is only one car in the race and the animal usually stays alive. The excitement of the chase is infectious, and certainly makes exciting material for newspaper articles and television films. But a more objective observer begins to wonder, after a few days on Operation Zebra, what makes Don Hunt return day after day to the arduous and unhappy business of wrenching wild animals away from their natural habitat.

Wrestling zebras to the ground

The chase is fast but short: two or three kilometers. It is hard on the vehicles (Hunt says he spends $2,000 each month to keep them running), but it must be harder on the zebras. Some are clever; when one lone territorial stallion leapt to safety across a stream bed too deep for the car to follow, Hunt said, "That feller's getting smart. We must have chased him half-a-dozen times—he always gets away." He turns the car and tries again.

When the lasso finally drops over an animal's head, Hunt stops immediately. The zebra bucks and snorts at the end of the rope, tightening the noose around its throat; ten men leap from the vehicles, grabbing ears and tail, slipping ropes around legs and muzzle. If it is a small zebra the men are able to hold it standing up, but large animals must be wrestled to the ground to receive a tranquilizer and four other injections, including cortisone.

Lying there, with ropes pulling from every extremity and drawing great shuddering breaths, the zebra is still able to buck and shake men from its back. "Hold her, hold her," yells Hunt. It is a female, heavily pregnant (p. 41). Later a mare, separated from

Hunt takes personal pride in frequently being the first man to grab the animal, by tail or ear. Here he helps down a heavily pregnant female while she is given injections. Many such mares later abort.

Violent "help" for the Grévy's zebra

Mauled when a lion got into the pen, this "rescued" zebra later died of its wounds, some visible here.

her foal in the chase, turns into the speeding car; she tumbles. "Don't take pictures," shouts Hunt, "she may have killed herself." She hadn't, and they caught the foal, too.

As each animal calms under the drugs, it is pushed into a crate and left standing therein to await collection when the morning's catching is over. The most Hunt has caught in a day is five animals. Sometimes he catches none at all.

Hunt's repeated chases have probably disturbed every animal in the southern Samburu Grévy's population at one point or another. In the Samburu Reserve, just as on the plains, the zebras now stampede at the sight of a vehicle. In the last dry season, isolated groups went higher than ever before on the lower slopes of Mount Kenya at the southern edge of their range. On the Lawe Downs some took refuge on a private ranch, a mixed herd of 120 stallions and mares, juveniles and adults jumbled together in a totally unnatural manner, nervous and disturbed.

After the trauma of capture, the zebras enjoy some weeks' respite in the holding pens at the Operation Zebra base camp in the Samburu Reserve. Then once again they are thrust into crates and loaded onto trucks, this time to endure the 24-hour drive down to Tsavo West.

Bruises while being trucked

Ten animals were moved down in April 1977, another 20 in July; all of them sustaining severe abrasions from the rough, unpadded timber crates. On the day after the first batch arrived at Lake Jipe in the southwest section of the park, three of the seven females aborted; likewise, of 16 females in the second batch four aborted the day after the journey. Thus seven potential recruits to the Grévy's population were lost. In addition, two stallions died in the pens.

Goss, to whose care the animals had been entrusted, left Kenya on vacation five days after the Grévy's arrived at Lake Jipe and was still away when all 28 surviving zebras were released on July 25 after as few as 17 days in the pens. An American camera team filmed the release for the *Animal World* television program. An air search was mounted the next day and during four days 22 hours were flown but there was no sign of the missing zebras. Some weeks later, however, an occasional visitor to the park claimed to have seen a group of 23 Grévy's at a distance of a few hundred yards. Although this sighting was not confirmed, Goss includes it in his reports. The remaining 20 were released in 1978. Since August, Bill Woodley, the new warden at Tsavo West, and others have reported sightings of up to 30 zebras, but it is unclear whether the same ones are being counted more than once.

Three stallions stayed close to the Lake Jipe pens. The forlorn trio, having become habituated to their captivity, spent their days in the nearby woodland and returned regularly to the pens for food.

To Kenya's wildlife scientists, the first stage of Operation Zebra was a distressing failure, not just because most of the animals appeared to have been lost, but also because the operation was conducted so carelessly. But Goss and Hunt were not disturbed.

Said Goss: "We don't regret what we did; we had no way of knowing what would happen. We hoped they would stick together but they didn't."

Hunt: "Twenty-five zebra lost is no big panic."

In October 1977, Dr. Warren Thomas, the director of the Los Angeles Zoo and a customer of Hunt's, visited Kenya. As an acknowledged expert on habituating animals to unusual surroundings, he made some recommendations on the translocation, including keeping some animals captive as a breeding herd.

When Goss first learned that the released animals had strayed and were lost, he evidently concluded this was because of an urge to wander and suggested that Hunt should catch mares with young foals, in the hope that such animals would be less inclined to stray. Hunt duly caught mares and foals and, to simplify matters, also caught obviously pregnant females who would produce their foals in captivity.

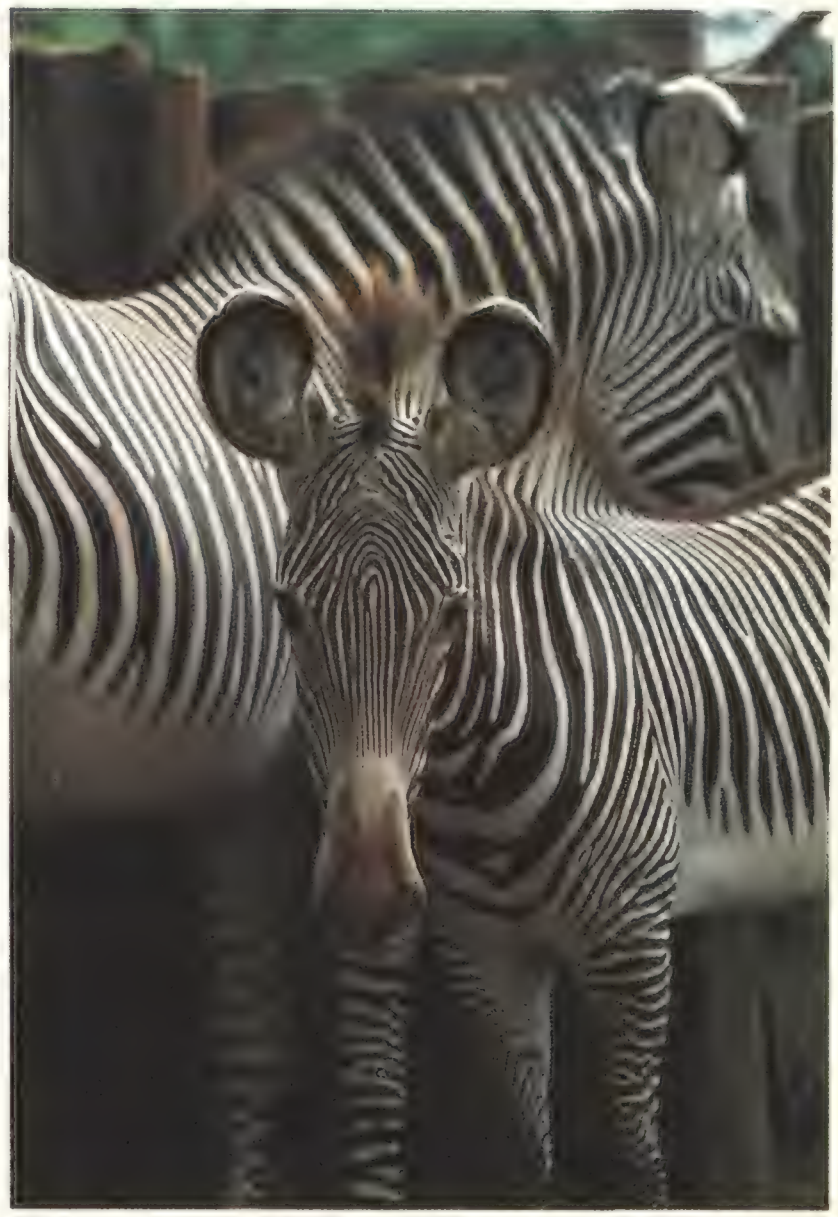
Thomas took this process a stage further, proposing that once breeding herds were established in enclosures in the park, only the offspring should be released. Hunt was enthusiastic about the idea: "It'll work," he said, "if the young are born there and released into the immediate area. Feeding them is very important—then there's no way they'll move out again; they'll have nothing else in their heads."

Killing lions to save zebras

In November 1977 an additional 20 Grévy's zebras were moved down to Tsavo West. Ten were put in the Lake Jipe pens and the remainder in pens built beside the swimming pool at the Kilaguni Lodge. Two more females aborted shortly afterwards. Lions located the captive animals and soon became accustomed to the kerosene lanterns that were intended to keep them away. As they became bolder still, rangers at Lake Jipe shot three lions dead in their attempts to keep them away from the zebras, but even so, one stallion was badly mauled. Ted Goss ordered the rangers to shoot the lions only if they actually entered the pens.

Lions had also located the pens at Kilaguni, to the considerable concern of the lodge management, whose guests frequently take after-dinner strolls around the pool. Rangers managed to keep the lions at bay for several weeks until one night in April when, with the

Armed guard stands watch over lantern-lighted zebra pen. Six lions have been killed as they broke in.



An adult and foal huddle in a pen at Samburu. Of the 70 captured to date, 50 were shipped on to Tsavo.

Violent "help" for the Grévy's zebra

lodge generator broken down and the grounds lit only by the dim lanterns, five lions finally broke into the zebra pens. The ranger on duty bravely confronted the beasts with his 50-year-old Lee Enfield .303 and accounted for two males killed and another two badly wounded. One zebra was killed in the affray, another three were badly mauled and later died. (It should be mentioned that although these details of the lion attacks and shootings came from park rangers, Goss himself has officially acknowledged the shooting of only two lions.)

A minor furor erupted. Not least voluble among the complainants were Nairobi residents who had been refused protection when lions made nightly excursions from Nairobi National Park to kill horses in Langata

Awaiting an uncertain future in alien territory, these Grévy's are packed into Samburu holding pen.

recently. "How is it," they asked, "that when lions kill horses outside a park they are allowed to go scot-free, but when they kill zebras inside a park, they are shot dead?"

But Operation Zebra was not abandoned. Undaunted by the turmoil, Goss set about constructing another, larger pen in the Ngulia Valley, a more remote part of Tsavo West. Lion-proof fencing three meters high was supported on timber cut in the Chyulu Forest Reserve (where indigenous folk may not even graze a goat, let alone cut down trees) to make a pen 100 meters square. The 14 surviving Grévy's zebras (there had been more deaths at Jipe) were moved to the Ngulia pen in late April. Shortly afterward another lion was shot as it frightened the zebras in its attempts to break through the fencing. Soon after, a zebra died of disease.

As of June 1978, some 17 months after the inception of Operation Zebra, 70 Grévy's zebras have been caught, some have died or been killed in pens, and an unknown number survive. At least nine females have lost foals stillborn, and six lions have been killed and two wounded so far by the protectors of the translocated zebras.

In March a Kenyan government official stated in a report to the International Union for Conservation of Nature and Natural Resources that "50 Grévy's zebras have been successfully translocated to Tsavo West"; as recently as September Goss asserted that the operation continues.

Willed to Harvard as a Renaissance study center, Berenson's beloved I Tatti is near Florence.

By Alexander Eliot

Berenson's life as a connoisseur was a fine art

A scholar, a famous high priest of culture and an agent extraordinary—examples of his taste are displayed at National Gallery

Two decades after his death at 94, Bernard Berenson seems to matter as much as he ever did—which is to say a great deal—as a tastemaker of international high culture. The National Gallery of Art in Washington will open a wide-ranging exhibition, *Bernard Berenson and the Connoisseurship of Early Italian Painting,* on January 21. The show has been timed to coincide with the College Art Association's convention, also in Washington, at which a paper on the use of photography in connoisseurship, especially as it relates to Berenson, will be read. Moreover, Ernest Samuels' comprehensive biography, *Bernard Berenson: The Making of a Connoisseur,* will be published in April by The Belknap Press of The Harvard University Press. What are the ingredients of the late art historian's grip upon American imagination?

In search of answers to that question, my wife Jane Winslow Eliot and I recently revisited B.B.'s villa, I Tatti, near Florence, Italy. We had been acquainted with the man himself; for us, Berenson exemplified

Suitably framed, and in way, a work of art himself, Berenson is reflected in a mirror in his I Tatti bedroom. He told Kessel the first thing he wanted to see in the morning was himself.

Photographs by Dmitri Kessel

an ideal of the beautiful. He was both hedonist and hero, and a unique force in the history of taste.

Berenson was born in 1865, in the Lithuanian-Russian-Jewish "Pale of Settlement." His father, a highly intelligent man, was swept up in the intellectual rebellion spilling into Lithuania from across the nearby German border. His early years were imbued with Orthodox Jewish religion and also with joyous appreciation of each new day. Springtime in particular, as he recalled in later years, seemed "big and fresh and dewy" to the boy. When he was five, his favorite grandmother's death shocked him into a resolution which shaped his entire career. He recorded it in his autobiographical essay, *Sketch for a Self-Portrait:*

"Her departure stunned me. . . . Death was the evil of evils. . . . Sticks and stones do not die. Better then to be a stick or a stone. But they have not lived at all. No, no! Anything rather than not to have lived. With that utterly childish conclusion, I was for ever liberated from death."

And in the same essay he explained: "From childhood on I have had the dream of life lived as a sacrament. . . . The dream implied taking life ritually as something holy."

When Berenson's family emigrated to Boston in 1875, it entered into a world so ugly and painful to the boy that he never afterward willingly referred to it. His father became an itinerant peddler of tin pans, and he himself a gloomy bookworm. His second decade of existence he was to describe succinctly in a post-Harvard essay as "living alone with one's thoughts and anguish and despair." Fortunately for American culture, Harvard accepted Berenson and gave him a kind of rebirth. When he graduated in 1887, a few admiring professors and friends got up a subscription to send him to Europe so he could continue his studies.

Immaculately turned out, Berenson walked with confidante Nicky Mariano at I Tatti in 1950s.

After nearly two years of wandering the Continent to look at paintings in the great collections, he settled in Florence—where his money ran out. But, as he wrote Isabella Stewart Gardner, a very rich Bostonian who had been one of his initial backers, "a friend has quite surprised me with an offer of enough money to keep me abroad for another year." Berenson began picking up masterpieces for Mrs. Gardner in 1894. Soon afterward she began to dream of creating her own museum. Over the next ten years or so she was able to form a great private collection with his help, while he lived comfortably, to a large extent by charging her a five percent commission on each purchase.

Those early years in Italy also saw first publication of four small but seminal books from B.B.'s pen. Regularly reissued under the collective title *Italian Painters of the Renaissance,* the essays still prove indispensable for students of the subject.

The cypress allée today. Outside and in, everything at the estate was ordered for its esthetic effect.

During the same period B.B. sat in the dank print room of the Uffizi Gallery to write a reasoned and elaborate catalog of Florentine Renaissance drawings. (This he diligently kept up-to-date afterward, revising it a final time at age 92, and it remains his most impressive monument of detailed scholarship.)

In 1891, Berenson had joined forces with a fellow art lover, a tall, handsome woman of humor and character named Mary Costelloe. They were married in 1900. B.B. and Mary were to be a faithful couple, after their fashion, until her death in 1945. But their romantic attachments to others were widely known and discussed, especially in his case. Both of the Berensons were people-eaters, compulsively sociable, and they created their home along the lines of a lovely inn for distinguished friends. They themselves traveled a great deal, viewing art and returning visits.

Mary's contribution to B.B.'s connoisseurship appears to have been far greater than generally supposed. During the early years she strengthened his will to prove himself. Later on, however, B.B. complained that he "should not have competed with the learned," nor "become that equivocal thing, an 'expert.' " Contrastingly, Mary thought of herself as the perennial amateur and felt just a bit guilty about that. In a modest travel memoir entitled *Across the Mediterranean*, she wrote:

"I have traveled too much with the idea of enjoying beauty and nothing else. Experience is convincing me of the error of my ways. The moment, or moments, of sheer pleasure and loveliness (I except landscape, which can satisfy for hours, almost days) passes—what is left? For my husband, with his insatiate curiosity about the genesis, the affiliations, the interinfluence of all forms of art, the most fragmentary rudely scratched stone or rough-hewn bit of sculpture is full of interest and suggestion, while I am often stranded high and dry in a museum, having exhausted my own reactions to the few objects of real beauty preserved there, although he is so full of excitement that he stays on and on and is capable, even, of persuading the caretakers of out-of-the-way little collections probably never again to be visited by us, to let him go on by the light of a candle—while I with my dull wits wait impatiently in the motor thinking of the long drive back in the dark and of the dinner unduly delayed."

On one such trip, B.B. wrote to Isabella Stewart Gardner in Boston that he had been introduced to President Theodore Roosevelt in Washington as the world's greatest critic of Italian art, "and while I was smiling the deprecating fatuous smile that one always pins on on such occasions, the President pleasantly remarked that he knew all about Mr. *Berington.*"

Concerning a later socializing event in New York, Mary for her part wrote: "A horrid thing is the necessity we are under of sometimes chucking less important for more important people, like Rockefeller . . . the other night . . . the table literally groaned under orchids, caviar, turtle soup and golden plate. Twenty-two gross old people sat around it, guzzling champagne . . . the women all over 50 all fat and all except myself nearly naked and hung with ropes of pearls and diamonds. After dinner, opera singers came in and yelled horrible music. B.B. nearly fainted away."

Doubtless he was tougher than that. It served B.B.'s purpose, however, to seem as fragile as he was exquisite. He had a frightening temper, too, which Mary often tested. Once, for instance, she brought a young male protégé to I Tatti in B.B.'s absence, and made

Alexander Eliot's article on rare Michelangelo drawings discovered in a Florentine crypt appeared in the August 1976 issue of SMITHSONIAN.

A portrait of Berenson taken in 1887 indicated, even then, the makings of the esthete to come.

him very much at home. Nicky Mariano, who began her career as Mary's chum and, after Mary's death, ended it as B.B.'s companion for the rest of his life, has told this story:

"Mary kept rushing out in the car to take her young friend on sightseeing tours. 'I must give him one of our smaller pictures as an encouragement,' she said, and there and then selected a charming small Quattrocento panel representing the youthful John the Baptist in the desert. 'It has no definite attribution,' she explained, 'and B.B. will not even notice its not being there any longer.' "

He did notice; and, in absentia, B.B. attributed the panel to Domenico Veneziano. What would have been a prize of the I Tatti collection was eventually resold for a six-figure sum. It now hangs in the National Gallery in Washington.

Attributions, as everybody knows, are all-important to collectors. That is why Joseph Duveen—the art wheeler-dealer of all time—sought Berenson out in 1906 and engaged him as a consultant. Their business relationship lasted for three decades. "Never buy an Italian picture without a Berenson approval! Never!" was Duveen's oft-repeated advice to the likes of Andrew Mellon, Samuel H. Kress, Henry Clay Frick, Joseph E. Widener, and Henry E. Huntington. B.B. would invariably be asked for his opinion of Duveen's own offerings, and he received a handsome commission on every sale.

In living room at I Tatti, virtually unchanged since Berenson's day, hang, from left: *St. Catherine,*

This highly profitable relationship reached an abrupt and unsweet ending in the late 1930s. Duveen thought he had a very rare "Giorgione" to sell to Andrew Mellon. B.B. said no: the painting was by Titian. Mellon already had "enough" Titians, and so that was that—or was it? Having emphasized his own independence while doing Duveen out of a handsome profit, B.B. later reversed his own judgment and reassigned the picture to Giorgione with the help of Titian. It is the *Adoration of the Shepherds,* which Samuel Kress bought and later gave to the National Gallery (pp. 54-55).

Berenson died in 1959, leaving everything to the great benefactor of his youth: Harvard University. His coolly beautiful villa is now a center for Italian Renaissance scholars under Harvard's aegis. Except for tours by appointment, the villa is not open to the public at large, and it is pinched for endowment. Yet I Tatti continues to cast its spell upon a dedicated few.

Despite its present institutional overtones, there is

St. Lucy, both by Simone Martini; a Madonna, Matteo di Giovanni; *Madonna in Garden,* Vincenzo Foppa.

nothing musty about I Tatti. The Tuscan pictures on the walls are superb, naturally. But the comparable quality of the Asiatic sculptures poised upon massive Florentine chests along the corridors comes as a surprise. Although Berenson never permitted himself to discuss Asiatic sculpture in print, he was a connoisseur in that area also. Indeed, his wife Mary remarked in a letter that B.B. tried to collect "only first-rate Eastern stuff—to Italians, of course, we're more lenient."

B.B. reflected: "It is the ensemble that counts. I flatter myself that as furniture & decoration our works of art help to make a pleasant enough home for people of our tastes & pursuits." This self-annointed High Priest of Beauty created a secular temple in I Tatti.

The heart of the villa is its 80,000-volume library. "If a young man with moderate equipment were to spend four years in this library," B.B. once observed, "he would emerge a cultivated gentleman." The 30,000 volumes added since then have been chosen for their value to art historians and historians of the Italian Renaissance. It was here that David Alan Brown, the National Gallery's curator of Early Italian Painting, worked on his catalog for the show in Washington. What would the exhibition's message be?

"I'm borrowing a whole lot of documents and photos from I Tatti," Brown said. "I'll put these together with some 20 paintings back in Washington. If I could give a course in B.B.'s significance I'd do it with lectures and seminars, but here I must work visually. And this fits what I'm trying to say. I'd like to point

Snapshots at I Tatti show Berenson with future wife, Mary, in Sussex, England, 1898; with John Walker, then chief curator, National Gallery of Art, in 1939; and with Harry Truman, 1956.

On the back wall of intimate French library at I Tatti is a Madonna by Jacopo Bellini.

out, first, that recent trends of research lead away from studying works of art for their own sake, toward the study of history. In other words, today's scholars tend to look more at the context of a given picture than they do at the form of the thing in itself. There is debate about form *versus* context, but we must have both. Berenson himself stressed form, of course. He was the man who brought order into the realm of the Italian primitives. He was a connoisseur first, however, and a scholar second. In his day, connoisseurship was naturally coupled with trade. Berenson never knowingly faked an authentication, in my opinion, but he did take commissions on the many masterpieces which he steered into American collections."

"Does that make him less admirable?" I asked.

"No, but the authentication of pictures has since become a curatorial discipline. Berenson had the misfortune, if you will, to live on into an age when his methods seemed out of date if not actually suspect. Also, he saw his pioneering work revised almost beyond recognition, which must have bothered him. Imagine that you were the first person to blaze a trail across the Cumberland Gap, and that years later you returned to find a busy interstate highway where your trail had been. We're following the route he laid out, all the same, and only a Dark Age of Connoisseurship would mock Berenson's achievement. But we could enter such a Dark Age if we were to forget the main thing which he taught: careful scrutiny of the actual work of art. Facts about an object are never enough. Form must be allowed to speak directly in its turn. That's connoisseurship, as distinct from mere expertise. And that's just what our exhibition at the National Gallery will be about."

This eclectic and scholarly approach to the varied subject explains the carefully chosen title for the National Gallery's exhibit. It addresses Berenson and his taste, of course. But it is also concerned with the demanding and difficult subject of connoisseurship itself. The exhibit, which will be on view through May 13, includes paintings—many of them outstanding in the world—and more than 80 photographs, letters and books illustrating Berenson's impact and achievement.

Dr. Emma Micheletti, the white-haired director of the Bargello Museum and vice-director of the Uffizi Gallery, agreed that B.B. helped whole generations to "read" the art works in her care. And only wished that he had applied his studies to Renaissance sculpture as well as painting.

"Sculpture played into the 'tactile values' which he found in the paintings," Dr. Micheletti explained. "Look for instance at Donatello's alert and solid sculpture in the Bargello. Doesn't it bring to mind the supremely realized frescoes of a great Berenson favorite, Masaccio? Verrocchio and Pollaiuolo were masters of painting and sculpture alike. Morover, three generations of Della Robbias—Lucca, Andrea and Giovanni —merged painting along with sculpture into their ceramic bas-reliefs. For freshness of color and delicacy of form their work has never been surpassed."

Berenson had a special touch in his relations with

people. Jane remembers his coming for lunch at her mother's house in Florence:

"He made us children feel at ease and subtly encouraged us to talk, but mostly I just looked at him. He was a small, dainty man, lovely to look at. I liked the way his ivory-hued hands caressed the dark wood of our Japanese table, and the many-faceted Bohemian wine glasses with their black bases. 'Always touch things to know them,' he told us. And when I objected that we weren't allowed to touch paintings, he explained: 'No, but you must feel them nonetheless, in your fingertips and even the palms of your hands.

In Berenson's study is large painting of a Madonna by Domenico Veneziano, predella by Nardo di Cione.

Until you do that, you haven't experienced what your eyes show you.' I realized even then that he had all his senses delicately geared to the precise space and the exact moment in which he found himself.

"He would invite us to I Tatti and suggest that we children play hide-and-seek in the library. 'So long as you don't run,' he would add softly."

I did not meet Berenson until he was almost 90. Nicky Mariano warmly introduced Jane and me, but B.B. seemed hardly to notice. He sat huddled in a shawl and sunk far down in a brocaded armchair, looking wax-pale and as if totally unwilling to communicate. Feeling that we had intruded, I was glancing about for some means of escape when he asked edgily: "What do you do?"

"I'm a journalist, sir."

"Thank God!" he cried. "I thought you might be an art critic! What's your paper?"

"Time," I said. Nothing would have induced me to add that I wrote the magazine's art section.

Now, putting all ten fingertips to his brow, B.B. gave a soft groan and inquired: "What, may I ask, is *Time*?"

"Something like *Newsweek*," I explained. "Don't ask me what that is, because I saw it on your hall table as we came in."

With that, B.B. threw back his fine head and laughed. He asked us to stay for tea. Formalities out of the way, he turned his full attention to Jane and instantly recognized her. Very tenderly, he inquired after her mother. So began a most beautiful and rather funny evening.

His final word was no word at all but a gesture which moves me still. I had already stood up to go. Sucking in my expansive waistline, I was reminding myself to try and achieve a graceful exit for once in

Another view of the study shows, left, *Madonna and Saints* by Neroccio; by fireplace, a friar by Giotto.

my life. B.B. fixed me with an icy look from his armchair as if to say, "Get this!" And then the old, old cynosure of neighboring eyes blew *me* a kiss!

"My greatest joy," he once confessed in a letter to one of his many female admirers, "is just looking, looking, looking, until, indeed, I become the thing I look at." Although such a process appears to verge on sorcery, I believe that he accomplished it from day to day. Still more remarkable in my view, however, was his capacity for imparting his own sensibility to others. No man had greater impact upon American taste than he did. Yet Berenson was no broadly bullying generalist; quite the contrary. From first to last, his genius was precise, personal and delicate.

National Gallery of Art, Washington

Detail of the little painting Mary Berenson gave away is from Veneziano's *Saint John in the Desert.*

This painting, *Adoration of the Shepherds,* now attributed, mostly, to Giorgione, caused the split, after decades of colleagueship, between Duveen and Berenson. Duveen said Giorgione. Berenson, Titian. Years later, Berenson decided it was by Giorgione, but with the help of the young Titian.

National Gallery of Art, Washington

By Tom Prideaux

The man behind Washington's Kennedy Center

Roger L. Stevens is an intensely practical visionary whose efforts have done a lot to turn the capital into a 'good show town'

When Roger L. Stevens' friends were planning a tribute to him at the Kennedy Center in Washington some time ago, they discussed what sort of gift to give. "Let's bring in a wagonload of hundred-dollar bills," said Abe Fortas, "and set it on fire."

But, even as a joke, they decided against it. For with Stevens' record as a prodigious spender and investor, it might have created an unfair image of a man with money to burn. Instead, at the end of a gala evening, they had Carol Channing sing "Hello, Roger!" and gave him a plaque that called him an "unstoppable visionary."

Kennedy Center itself testifies that Stevens is a nonstop visionary. Since it opened in 1971 as both a memorial to President John F. Kennedy and a home for the performing arts, it has altered the quality of life in the nation's capital. More than 20 million sightseers have taken its free guided tours. Another 12 million have packed its theaters and concert halls, and attended its free educational programs. As a setting for social and semidiplomatic events, it generates a mood that is reassuring to foreign visitors. Between the acts of its performances, people enjoy sipping champagne on the long terrace, with its line of willow trees, its illuminated fountains, its lovely view of the Potomac; and they like promenading beneath its rows of international banners.

The Kennedy Center's chairman in its Hall of Nations, hung with flags from all countries we recognize.

The Center is headed by a two-man team: Roger Stevens, chairman and prime mover, and Martin Feinstein, executive director. Feinstein is immensely effective at providing fine music and dance, while Stevens is mainly concerned with theatrical productions, many of which he fosters and nurses into existence specially for the Center. His operations are infuriating to some of his attackers. But beyond any doubt, if the city of Washington might once have been compared to the Sleeping Beauty, too deep in slumber to be aware of the performing arts, then Roger Stevens was the tall, blue-eyed prince whose kiss woke her up.

Born in Detroit in 1910, Stevens belatedly became something of a rags-to-riches case, but with an important difference. He took money for granted. His father, a well-to-do real estate broker, sent Roger to an Ivy-League prep school, Choate. Later Roger became fascinated by the manipulation of money, but he was never awed by it, any more than a chess player is awed by his chessmen. When the Depression struck his father, Roger canceled his enrollment at Harvard and entered the University of Michigan at Ann Arbor, to save money by living at home.

After a restless year, he quit the university and grabbed any jobs he could find: tending a gas station at $12 a week, polishing gears on a Ford assembly line. He also worked in a real estate office, earning nothing, learning a lot. Between times he camped in libraries, reading Fielding, Shaw, Shakespeare, Proust, Mann, Thomas Wolfe and Pirandello. The reading habit stuck with him.

Making a profit from real estate hunches

When the Depression abated, Stevens returned to real estate. He became a creative finagler. Seeing hidden values in failed hotels and office buildings, he gained control of them and then sold them at a profit until he had accumulated a nest egg of $50,000 at the age of 26 and was earning $25,000 a year. His greatest problem, he said, was finding other people who believed in his hunches.

In 1937 he found a true believer in attractive Christine Gesell, an Ann Arbor undergraduate whose uncle, Arnold, was the famous child psychologist. She married Stevens and they took off on a lavish six-month honeymoon around the world.

Back home, Stevens joined the Detroit Theater Guild, and walked into a new world where he could gamble on his taste and hunches—and meet exciting people. On a trip to New York he met a high-riding producer, Alfred de Liagre jr., and announced that he was ready to start his career by buying the old Belasco

Photographs by Yoichi R. Okamoto

In New York, Stevens chats with Jason Robards, who has appeared often at Center.

Backstage with Jane Alexander of *First Monday in October*. The play opened in Washington.

Theatre. De Liagre warned that theater-owning was risky, and Stevens ended up putting money into a new de Liagre production, *The Madwoman of Chaillot* by Jean Giraudoux, which won the 1949 Drama Critics' Award as the year's best play and left Stevens incurably stagestruck.

He rushed *Twelfth Night* from an Ann Arbor festival to Broadway (it lost some $40,000), and backed Ibsen's *Peer Gynt,* and Barrie's *Peter Pan* with music by Leonard Bernstein (a financial hit).

Stevens' most arrestingly theatrical act, though unrelated to Broadway, took place in 1951. Creating a grand baroque pattern of deals and loans, he formed a syndicate to buy the Empire State Building for $51.5 million, the highest price ever paid for one edifice. The syndicate turned it over three years later at a profit of nearly $10 million.

Around Broadway Stevens was regarded as young Lochinvar out of the Midwest. He teamed up with Robert Whitehead to start a producing firm, and was named to the board of several high-minded theater groups: ANTA (American National Theatre and Academy), the Phoenix Theatre and, most impressive, the Playwrights Producing Company. This elite batch of dramatists, wanting to control the production of their own works (and those of a few chosen outsiders), picked Stevens to be their financial adviser—and also, they assured him, to give his opinion on the merits of their works. John Wharton, a lawyer-member of the group, said of Stevens, "Everyone in the theater took an instant liking to him."

For a while the Stevenses shuttled between New York and Michigan, having friends in both places. Sailing for Europe one summer with the Whartons, Stevens called them to the deck and pointed at the Empire State Building as the ship left New York harbor. "I own that," he seemed to say, as though bemused that the man who owned a six-room house in Ann Arbor also owned the tallest building in the world.

While he worked on at least 40 shows with the Playwrights, he jumped into 30 other Broadway productions, running from the works of T. S. Eliot, Eugene O'Neill, Tennessee Williams and Dylan Thomas to Shakespeare and Shaw, and swung back to Leonard Bernstein with *West Side Story*. He was involved in commercial centers in Seattle and Boston, bought and sold hotels as casually as he might shuffle a poker deck, joined the Volunteers for Adlai Stevenson, and ended up as Chairman of the Democratic Finance Committee for the 1956 campaign—a show that flopped.

When the Playwrights began to decline, Stevens was accused of being remote and sometimes rude. He skimped on their profits, his colleagues said, in order to refund as fully as possible the investors he had persuaded to help stake their shows. Stevens firmly believes in honesty for its own sake. Yet, with his personal blend of pragmatism and idealism, he also never forgets that his future success, his bank credit and his fiscal flexibility all depend on his honor. He once boasted that "nobody ever loses on my deals," six brave

Theater and art critic Tom Prideaux has written frequently for SMITHSONIAN, *including articles on Ellen Terry, Preston Jones, King Tut's treasures.*

With British actor John Wood on set of *Deathtrap,* a play that Stevens produced with Alfred de Liagre jr.

Drama critic Richard Coe, Carol Channing, Mrs. Stevens and Stevens at a party following *Hello, Dolly!*

words that he would like to see inscribed on his coat of arms.

Stevens' detractors complain that, for a prominent power in American theater, he is too orthodox, too stuffy in his choice of plays. Possibly so. But at the Kennedy Center with its widely diverse audiences he must provide a balanced selection for many tastes, high and low and in-between brows. What he does provide consistently are high-quality productions with good directors and a generous sprinkling of stars, such as Rex Harrison, Ingrid Bergman, Carol Burnett, Julie Harris, Mickey Rooney, Jill Clayburgh, Douglas Fairbanks jr., Jason Robards and Henry Fonda. He accepts the fact that many visitors to Washington are thrilled by seeing famous performers in person, so sensibly he makes the most of it.

In his own way, Stevens represents a healthy tendency in America's best noncommercial theaters to operate freely according to the enthusiasms of their directors and the needs of their communities. Across the country, from the Mark Taper Forum in Los Angeles to the Long Wharf Theatre in New Haven, the trend is away from the set patterns of many British acting companies (excellent as they are) toward a more American-style flexibility.

Over the long run Stevens' selection of plays has in fact been surprisingly eclectic. He encouraged and helped back the Phoenix Theatre's wildly untamed *Oh Dad, Poor Dad, Mamma's Hung You in the Closet and I'm Feelin' So Sad,* and sponsored two more plays by its gifted offbeat author, Arthur Kopit. He backed plays by such innovators as Max Frisch, Federico García Lorca and Jean Genêt. And in effect he subsidized Harold Pinter early in his career by giving him a $1,000 grant to write a new play. In return, Pinter gave Stevens first refusal rights. Stevens has done the same sort of thing for other struggling authors, but, he says, "Pinter was most appreciative."

Stevens is downright captivated by the unorthodox British writer Tom Stoppard, five of whose plays he has backed. Last September, in the Center's Concert Hall, he produced Stoppard's fantastic *Every Good Boy Deserves Favour.* Requiring the entire Pittsburgh Symphony Orchestra, conducted by Andre Previn, as part of the plot, it was too costly a venture for Broadway, but Stevens managed it in Washington with negligible loss, and made its opening night a gala occasion that added luster and prestige to the Center itself.

Stevens began to take root in Washington in 1964 when he was named Chairman of the National Council of the Arts under President Johnson. With an authorized $10 million a year, Stevens set out to stimulate American arts with grants, big and small (he also gave, from his own funds, a substantial sum to Washington's first-rate resident theater, Arena Stage). During the same period he was appointed chairman of the proposed cultural center in the capital, a job so engulfing that he gave up the Council.

The idea for the center, born during the Eisenhower years, kept changing form like a cloud bank in a high wind. Where should it stand? On the Potomac? On the Mall? How much should it cost? $15 million? $75 million? A group of separate buildings? Or all under one roof?

Roger L. Stevens

Stevens in conference with his longtime partner, Robert Whitehead, in their New York offices.

When John F. Kennedy took office, he put Stevens in charge of all the dilemmas and, of course, of raising money. After Kennedy's death, the Center's name was changed to the John F. Kennedy Center for the Performing Arts, and it was also designated as a memorial to the slain President. Then the cash came quicker.

And likewise the opposition. Critics warned that the Potomac site—Stevens' choice—would make the Center inaccessible to the public. The Watergate owners protested that it would jam traffic and keep people from entering their buildings (as if anything could). Many experts scorned Edward Durrell Stone's almost ingenuous design for the Center ("a marble Kleenex box"), hoping for a more grandiose presence, it seemed, and never imagining that in due time Stone's building, with its 66 bronze "tentpoles" holding up the overhanging roof, could take on the festive air of a riverside pavilion.

But Stevens had his own way, and busied himself with both major problems and minutiae. He figured that Stone's plan for trucks to deliver scenery at underground entrances was too costly. The entrances were shifted to street level. He ordered that when shows were going on at once in the three halls, their curtain times should be staggered to avoid congestion (and, incidentally, to keep the waves of thirsty spectators from overwhelming the bars during intermission).

Stevens' joy in his work hangs largely on one fact: he takes no pay for any of his Center jobs. Being independently rich, he can afford to liberate himself, so to speak, from the profit motive. He can carry on like an impassioned lobbyist, squandering his time, knocking himself out and getting his kicks from running a devilishly intricate and glamorous operation.

Stevens and Feinstein decide on all attractions that come to the Center, though each defers to the other in his field of expertise. Stevens, to be sure, is the theater man, and within the Center the Eisenhower Theater is generally his domain. About a third of all theater productions come from entirely outside sources, and are simply booked into the Eisenhower as they might be into any commercial playhouse, paying the usual fees and percentages to the Center. This season such hits as *Dracula* and *Gin Game* hailed from Broadway, and continued on tour after Washington.

But the much larger portion of shows is put together, or helped, by Stevens himself. In the case of *Annie,* one of the biggest musical hits in recent years, the show was aimed at Broadway but ran into trouble during rehearsals when some promised money was withheld. Stevens heard its cry for help, talked to *Annie*'s gifted producer, Mike Nichols, and then, like Daddy Warbucks in the show, helped provide money to rescue Little Orphan Annie. As a result, the Center became one of *Annie*'s coproducers, and has been raking in profits ever since, many of which are plowed into the Center's free educational programs. Stevens makes no money personally on any of these Center operations.

But where does this rescue money come from?

The money comes from a nonprofit subsidiary, a pool of some $500,000. Its funds are guaranteed by a group of public-spirited citizens, who want "to keep the theatrical ball in the air," and who can only lose—not make—money, since any profits go back to the Center. The fund is continually being reduced, and then replenished by box-office profits. So far, the balance of profits and losses has been so well maintained that in six years the original guarantors have never been tapped for additional cash.

Stevens' character is not easy to pin down. Twice it

Two men who help to run the Kennedy Center, executive director Martin Feinstein and Tom Kendrick, director of operations, meet with Stevens in his office at the Center.

has been said "he has ice water in his veins." But in one case it was meant as a compliment to his steady nerves in a crisis, and in the other as a slam at his ruthless drive. Even his admirers praise him in different terms. Deborah Kerr, who starred for him 25 years ago in *Tea and Sympathy,* and is with him now in *The Last of Mrs. Cheney,* approved him by implication: "I'd rather play Washington than anyplace else." To Tammy Grimes, another Stevens regular, "He is a genius, and a grown-up Tom Sawyer or Huck Finn." To the English star Wendy Hiller, "He is like an American out of a Henry James novel—a large man with a large soul, and I love him." Jason Robards sticks to facts: "Roger gives good parties for his friends. We watch football games together."

His business associates see a moodier, tougher side of Stevens. To Arthur Cantor, a prominent producer, "He's a decent man whose word is his bond. But he's an intensely private person, with a moat around himself. Not the kind of man you'd expect to hug you, but he's hugged the theater all his life. His enthusiasm is his strongest asset."

Victor Samrock, who worked with Stevens during the run of Jean Kerr's hit, *Mary, Mary,* recalls: "He'd stop at the office every month to find out his share of the profits, not to stash away—he had no acquisitive sense—but to invest in something else *interesting.* To him it seemed a crime for money to lie idle. He was fiercely competitive, and not always gracious. He'd yell over the phone, or throw something across the room. But all at once he was gracious again. Never held grudges. No petty malevolence."

Stevens' longest partnership—25 years—is with Robert Whitehead. Their firm, housed in New York's Paramount Building, is entirely apart from Kennedy Center, though once in a while the two operations overlap. Several years ago they both fell in love with *Texas Trilogy,* a series of three plays by a salty new playwright, Preston Jones. It made money for the Center during a 16-week run, but lost on Broadway.

But, win or lose, Whitehead enjoys his partner's poker-game nerve: "He's like an old-time American, a frontier gambler."

Old-time American charm runs all through Stevens' rambling home in Georgetown, two miles from the Center. A farmhouse 150 years old, it originally occupied 25 acres, most of which Stevens sold off for town

The Kennedy Center's chairman mulls over a point in talk with David Rockefeller jr.

Mrs. Stevens, a tireless lobbyist for animal welfare, greets a friend in her study at home.

houses. But its rolling lawns, boxwood hedges and rose bushes are still an ideal setting for a large garden party. The house has a long veranda that belongs in the great tradition of American back porches, a shaded hideout with wicker chairs for afternoon reading, iced drinks, dozing off and—for Christine—bird watching. She also welcomes an occasional possum or raccoon, for, as founder and president of the Animal Welfare Institute, she wants animals to feel at home. On her back porch she recently fed pound cake to a possum.

Because Stevens won't wear a wristwatch, Christine gave him a gold watch and chain 15 years ago. He lost it in a phone booth, and swore never again to carry a watch, which for a man who rushes almost daily to airports or conferences seems foolhardy. Yet he has developed an intuitive time sense, and he is backed up by two demon secretaries, in Washington and New York, who talk to each other by phone and keep their boss "in view" as if he were a fighter plane on a radar screen.

He usually takes vacations by traveling with his wife when she goes to animal welfare conferences. On such outings he tries to get a rest from seeing shows, but rarely succeeds. With her in Australia, he saw a play he liked, brought it both to the Center and Broadway, and now wants to import a whole Australian dramatic festival.

Four years ago the Kennedy Center took over management of the National Theatre in Washington, the city's only big commercial playhouse for shows on tour. It had recently been slumping. Stevens saw it, he says, "as another outlet for theater," which in itself made it irresistible to him. But for his critics it is deplorable: it gives Stevens the power of determining what commercial shows play in Washington. Recently, Stevens got mad at a difficult English star and refused to book her show into the National. He soon changed his mind. But meanwhile the show had to skip Washington and go elsewhere. Ironically, since Stevens has made the capital city more theater-minded, his power makes other producers more alarmed—and more envious.

Kennedy Center is closer to being self-supporting than any other performing arts complex in the world. And, since it is also a memorial to a slain President, it rightly derives funds from the National Park Service. Yet its financial problems are huge. Stevens is now battling Congress for extra time to repay federal loans, and to meet bolt-from-the-blue expenses: repairs on a vast leaky roof; and extra funds to operate a new experimental theater, generously endowed by the Japanese. Every spring the Center transports some 200 college students from across the nation to show their own theater productions in a two-week festival. And so it goes, with a year-round flow of 700 film shows, black theater, concerts, children's entertainment, all crying for lucre in the litany of inflation.

What Center is doing for rest of the country

What Roger Stevens and Martin Feinstein are doing for Washington is impressive. But more important is what the example of Kennedy Center is doing for the rest of the country. It enables hundreds of elected government officials, visiting or living in Washington with their families, to observe how a vigorous arts center can benefit a community. Seeing grand productions from La Scala or the Paris Opéra, or the best dramatic actors from the United States and Britain, they get a clearer idea of what the performing arts are all about. and will be better equipped to support them in their own constituencies.

Through it all, Stevens preserves his human dimension. He tends to details, giving $200 to help a favorite bookstore; fussing about moving Henry Fonda and his wife into the Stevens' apartment at the Carlyle Hotel while Fonda was rehearsing in New York for a new Center production, *First Monday in October*. In Christine's absence, he forgets that he is wearing the price tag on a new shirt at a dinner party.

At times Roger Stevens gives the impression that he is a man trying to be an institution, at other times an institution trying to be a man. It is precisely his efforts in both directions that make him a national asset.

A less well-known element of the Kennedy Center is the experimental musical theater laboratory. Here managing director Craig Impink receives a visit from the Center's boss.

THIS IS AN AD FOR PEOPLE WHO THINK ALL THE LITTLE COUNTRY INNS ARE IN OTHER PEOPLE'S COUNTRIES.

They seem to have been lifted, setting and all, out of some other place. The French countryside, an English village, the Swiss Alps.

North Carolina's country inns. You see them standing tall on the mountaintops, tucked into green and yellow valleys, set back in the trees beside a winding road.

And, while the feeling may be European, the hospitality is strictly Southern. One innkeeper says it's "like having company all the time."

You'll find fresh flowers and four-poster beds. Music boxes and dinner bells. Long tables loaded with steaming platters of home-grown, home-cooked food.

And outside your window, and off the wide verandahs, scenery like you thought you could only find on picture postcards.

The famous and the obscure have warmed themselves at the great stone fireplaces of the inns. Aaron Burr. John C. Calhoun. Woodrow Wilson. F. Scott Fitzgerald. William Jennings Bryan.

George Washington never slept at any of them, of course. But Cornwallis (a gentleman who reportedly caused him to lose quite a bit of sleep) did.

The inns, in a way, are North Carolina in miniature. Because the warmth

of the people, the reverence for nature, the deep sense of history, are everywhere you go. Everywhere the inns are. From the mountains to the sea.

So come, this year. Bring your camera, your heartiest appetite, and your comfortable shoes. And spend your vacation in a fascinating country. Yours.

For a listing of North Carolina's inns and other accommodations, and a package of free booklets to help you plan your next vacation, write North Carolina Travel, Department 197, Raleigh, N.C. 27699.

NORTH CAROLINA

Carl Westmoreland has lifted whole neighborhoods out of despair into pride, and home ownership.

Edmund Bacon planned it like this: no structure in town can look

By Richard L. Williams

Second of a series

Our older cities are showing age but also showing signs of fight

Billions in federal aid have been funneled into them; what they need now is many more citizens willing to work their heads off

They are aging, and they show their age; it is a long time since they got their urban-renewal facelifts. A long time since much of their mission—making and shipping the goods for a fast-growth nation—has shifted to other regions, other countries. Accordingly, they have been shifting to service industries. Just to tick off their place-names is to stir up a lot of history, both romantic and raucous: New York, Boston, Philadelphia, Baltimore, Chicago, Cleveland, Pittsburgh, Detroit, Cincinnati, Washington and a host of smaller way-points. Though shrinking, they still contain one out of every ten Americans. However uncomfortably.

The bad news is that some of these older cities may be at death's door; the good news is that some of those who inhabit them will never say die and keep striving to keep them, at least parts of them, alive.

The bad news is bad enough. Cleveland, for one horrible example, is flat broke and deeply in debt, scrambling through a crisis every time a municipal payroll has to be met. Chicago, still the most segregated city in the country (and maybe sneakily pleased to be), is under court order to put low-cost housing in white areas on pain of losing some of its $117 million a year allocation from the Department of Housing and Urban Development. "Low-cost housing in white areas" means mixing blacks with whites. Chicago, home to Gail Cincotta's workaday National People's Action and to the luxurious Art Institute, doesn't want to mix. How that tussle will come out, nobody can say.

The old textile town of Lowell, Massachusetts, birthplace of the Industrial Revolution in America,

down upon Founder William Penn's statue surmounting City Hall.

"Rabbit" Nazario at "rehabbed" Lower East Side pride and joy, with windmill, solar panels.

finding it hopeless to survive in any other way, has turned itself into a national urban park at an initial cost of $40 million—in federal money, naturally.

New York is, as everybody says, impossible, uncleanable, ungovernable, physically and fiscally a hopeless case. Out of stubbornness or nostalgia many people love it anyway, most of them content to stand and watch as it does or doesn't go down the drain.

Much more remarkable are some of the people who don't just stand there. Like the people whose faith (backed by New York Port Authority revenue bonds) put up the two tall towers of the World Trade Center (SMITHSONIAN, January 1978). Or the people who put up the Citicorp Center, a food, fun and financial complex on noisy Lexington Avenue. Or, to go to where the people live, take Roberto (Rabbit) Nazario who is 30 years old and smart, as we used to say, as a whip.

The bushy-bearded Rabbit came from balmy Mayagüez, and why anyone from Puerto Rico would prefer *Loisaida*—as they call the Lower East Side—is unanswerable, except that you can hope to get a job in New York. With some help from friends, Rabbit started a branch of Interfaith Adopt-A-Building. On the roof of the first abandoned building they adopted, they put in solar energy panels and a windmill. They had to hassle with gigantic Consolidated Edison to accomplish it, but now any leftover juice the windmill generates Con Ed must accept into its system and pay for, if only a few cents' worth a month. In short, Rabbit is beating the system.

"Our parents shook their heads when we started," says Rabbit, "but we realized there were great possibilities down here. Such a rich part of New York—why, in three blocks 26 languages are spoken! We have 12 major program areas now; in each one we'll give training and technical assistance and turn over properties to neighborhood and block associations. Sure, gentrification is starting, the moving in of richer people, because this part of town is so convenient. But it just proves we're doing something right."

Up on 119th Street, the sawing and hammering are done by a reformed street gang of Latinos and blacks, the Renigades (sic) of Harlem, led by Eulogio Cedeno. "Logy" is a 31-year-old from Puerto Rico, and a straightened-out drug addict. Says Logy: "What turned us on was that there was nothing good happening around here."

What also turned them on was encouragement from young Philip St. Georges, an urbanologist from Yale who left the New York housing department to become their "minister of finance." Both he and Ron Schiffman, of the Pratt Center for Community and Environmental Design, also worked with Rabbit Nazario's and other offbeat self-help groups. The Renigades learned that they could get in on the city's "sweat equity" program, which lends money and gives advice to groups rehabbing and managing the broken buildings where they live. (City administrations, however, have been notorious for foot-dragging when it comes to helping self-help groups.) Bankers Trust Company also came through with help, administering a city loan and kicking in with interim financing. The Renigades have finished three buildings with 34 units, are working on four more, plan to fix up an entire block.

One day last year an automobile caravan, red lights flashing, stopped in the South Bronx. Out of one car stepped President Jimmy Carter, to walk across the rubble of what had been an apartment building.

Photographs by Ralph Morse

At Unity Park in the South Bronx, Victor Merced and Ramon Rueda (in hard hat) stand before

Ramon Rueda, Victor Merced and other strivers of the People's Development Corporation looked up from their work of gutting an empty shell of an apartment. Says Merced: "It was like a dream, him stopping up here. You'd know that grin from blocks away."

They hoped he really saw their neighborhood, which still bore signs of its former respectability: a Roman Catholic church, a modern-looking school, the solid-looking firehouse of Engine Company 50, a crenellated armory and some struggling garden plots, all punctuating a scene of general desolation. The President must have noticed, for a few weeks later a HUD grant of $500,000 came through to help train the young of the South Bronx; another $2.6 million is on the way for training and for materials.

Like Restoration Plaza, an oasis of attractive stores and offices in the old and reviving Bedford-Stuyvesant part of Brooklyn, all the valiant projects of Rabbit Nazario, Logy Cedeno and the rest are small anomalies in a city that is losing perhaps 35,000 dwelling units a year to abandonment and arson, and at least that many jobs. But it is better to regard the anomalies as seeds of hope sprouting in a wasteland; they just may spread and take over.

Baltimore (pronounced with the "t" silent by many of its inhabitants) provides another, bigger example of bootstrap efforts, and of the problems of Eastern cities. Much older and a little larger than Dallas (SMITHSONIAN, November 1978), Baltimore is a lot less glossy.

On a tour bus carrying urbanologists back downtown after a visit to some close-in neighborhoods, a local leader speaks into his microphone: "Here it is the rush hour, and we're on a leading east-west street. Look, no traffic jam. That's because we don't have huge office complexes here; the *Fortune* "500" companies don't tend to have their headquarters in Baltimore. We're blue-collar, with a ring around the collar, and we smell of old auto tires. But we've done a lot."

So they have. And anybody who still dismisses Baltimore as so many strings of row houses, with their housewives forever scrubbing the white marble stoops out front, is well behind the times. For half a billion dollars, only a fourth of it federal money, Baltimore has immeasurably dressed up its downtown, though its retailing areas still need revitalizing. The Charles Center and reconstructed Inner Harbor areas, with a pentagonal, 27-story I.M. Pei-designed World Trade Center (nothing like New York's, but never mind) are marvels of civic achievement.

So is the urban homesteading plan, a Wilmington invention that Baltimore exploited. For $1—one dollar—a lottery winner may get an abandoned house that the city has taken over for tax delinquency. It may cost her or him $18,000 to $60,000 to rehabilitate, but the first cost couldn't be lower. So far, 500 people have done this and the city has thousands more houses to sell on the cheap.

Urban homesteading led to urban shopsteading,

a photomural that memorializes the neighbors who have worked on People's Development projects.

and a number of abandoned Mom 'n' Pop stores have been taken over for $100 apiece.

This is nice, but not entirely; quite a few groceries in slums have been taken over by Korean refugees; they get held up repeatedly (crime is down but not out in Baltimore) and before the shopsteading program began a mother of six was shot to death while waiting on trade.

It is a city that hates to throw anything away, and besides the dollar houses it has hung onto the 15-story Baltimore Arts Tower downtown, an anachronism on the skyline, no longer flaunting the big Bromo-Seltzer bottle that used to top it but still spelling out the trade name on the four faces of its clock.

"Baltimorons," H. L. Mencken used to call his fellow citizens, but Baltimoreans have great tenacity in hanging onto neighborhoods as well as clock towers. Ten years ago Interstate 83 was about to be bulldozed through the southeast part of town. A few neighborhood groups got together as SECO, Southeast Community Organization, and by hard, loud pressure stopped I-83 cold. (It was rerouted.) SECO, now grown to en-

Ron Schiffman (left) and Philip St. Georges have rallied New York City do-it-yourself groups.

Neil Bortz, developer of Cincinnati's Mount Adams, on steps above town houses overlooking the Ohio.

compass 60 groups, has stayed together to fight off any and all threats to its six-square-mile area.

As you go about the country from city to city, the surprising thing is not that so many people have given up on urban problems, but that so many haven't.

The latter group is still only a minority, or perhaps at best a sprinkling, and at first their efforts seem to be drops in a leaky bucket. Some of them are civic leaders, but another surprising thing is that many are not. They may be neighborhood nobodies whom the big wheels have hardly heard of, but they are fighting to keep their pieces of turf alive.

The biggest wheel to get involved is Henry Ford II, who got a third of a billion dollars together to build Renaissance Center on the riverfront in Detroit. He also has taken the biggest lumps for doing so: RenCen is indeed a fortress unapproachable on foot, which figures, perhaps, for a city the automobile built. Ford was only giving Detroit a massive symbol of faith; he apparently was not thinking about what kind of rebuilding might flank his center up and downriver, or what might be done about the vast wasteland to the landward of it. Charles Blessing, the retired and somewhat frustrated Detroit chief of planning, has given a lot of thought to this, but whether Ford and the city will pay much heed to Blessing's plans remains to be seen. Meanwhile, outside the RenCen enclave, downtown Detroit shows "not a glimmer of life," as critics say.

Moving and shaking in Cincinnati

Henry Ford, with all credit to his power and drive, is not typical of anything. More typical among small-scale city-savers are Neil Bortz and Carl B. Westmoreland of the Mount Adams and Mount Auburn hilltop neighborhoods, respectively, in Cincinnati. In different ways, both have done wonders.

They came on their scenes late, after a lot of history had gone by. A century and a half ago, on the sidewalks of lower New York, barkers used to cry in German to immigrants: "Come out to Cincinnati! The Ohio River valley is as beautiful as the Rhineland!" There were no castles there, but a gently winding stream that flowed through a basin rimmed by seven green hills. Tens of thousands came.

One of the loveliest hills was called Mount Ida, after a local laundress. Nicholas Longworth, Cincinnati's first millionaire, put a big vineyard on the hillsides and named it "The Garden of Eden." The place inspired his friend, Henry Wadsworth Longfellow, to compose *Catawba Wine* in its honor. Its name was changed after John Quincy Adams, the former President, came out to dedicate the world's biggest observatory on the eminence's crest.

Black rot ruined Longworth's Catawba vineyard and German immigrants replaced it on the slopes. Part of its name remains as Eden Park; a stone gateway there still bears the name Elsinore because its designer was struck by a production of *Hamlet* staged in the local music hall almost 100 years ago. Industrial smoke forced the observatory to close, and it became a Passionist Fathers' monastery.

For generations, Mount Adams was a working-class neighborhood, peopled by Catholics from Europe and determinedly white. In time many of the grandchildren of the settlers forsook the area, to be replaced by Appalachian whites. When Neil Bortz, a developer, arrived 19 years ago, it was in a state of advanced decay. He began by renovating four houses for young people to rent, and the example was catching. By today, more than 5,000 people, mostly white, have moved onto Mount Adams to take advantage of its convenience to town and its fine outlooks.

On the other side of Deer Creek, Cincinnati's original slaughterhouse area, rose the once much more fashionable Mount Auburn. When young Carl Westmoreland moved there in 1966, it had the birthplace of William Howard Taft, equally fine views of the city, a lot of tenant black families and a generally what's-the-use ambience.

Afroed, feisty, freckled and bilingually (street talk and drawing-room talk) articulate, Westmoreland decided that Mount Auburn didn't have to be that way. Where Bortz is proud that nothing but private money has gone into Mount Adams, Westmoreland is proud to take money wherever he can get it. He and eight neighbors started the Mount Auburn Good Housing Foundation with a $7,000 grant from a wealthy former Cincinnatian, began buying up and fixing up foreclosed and absentee-owned homes, and is proud to say that he has run his enterprise into a $9-million nonprofit business. The business, like the Madisonville Housing Services which Westmoreland runs in another neighborhood, turns despair into pride. So far, he has overseen the renewal of more than 2,000 homes and neighborhood stores—and banishment of unnumbered prostitutes and drug pushers.

"We *want* you to feel uncomfortable; we *want* you to be angry!" Westmoreland told blacks in the audience a year ago last fall at a Neighborhood Action Plan meeting in Savannah. "We built all this, but we don't own it. Something's wrong with that." By now, dozens of his black neighbors in Cincinnati do own what they have helped to rebuild.

Cincinnati has 42 other distinct neighborhoods, many waiting for a Bortz or Westmoreland to come along. It has Proctor & Gamble, the Reds, a good stadium for them to play in, a compact downtown with Fountain Square at its heart, one of the most populous and popular public places in the country. It has a system of second-story skyways, à la Minneapolis and St. Paul, that makes it easy to keep off the streets

Wielding a jackhammer, Westmoreland rips into a Mount Auburn house he is helping salvage.

Enclosed skywalks like this keep pedestrians off the streets of downtown Cincinnati.

With bolt cutters as his passkey, Milton Street opened 300 vacant houses to poor families.

while moving around in town. It has bad public schools in many of its neighborhoods. Its population has dropped from more than half a million to 450,000, and so it is reaching out cautiously to attract service industries. If it has become a kind of secret metropolis, unknown to the outside world, its people seem to like it that way.

Neither William Penn, who gave Philadelphia its first master plan in 1683, nor W. C. Fields, who more recently gave it the back of his hand ("I was there once. It was closed."), would recognize it today. The birthplace of the USA never went according to Penn's plan; neither did it ever close, or roll up its sidewalks at dusk. It did doze off for a few decades, while all the ills that beset older American cities overtook it. Lately, having come awake with a start, it has been fighting for its life. With some bravado PIDC, the local industrial development corporation, has circulated a poster putting posthumous words in W. C. Fields' mouth: "Philadelphia? I was wrong."

For a generation he was nearly right. William Penn's weathered 37-foot statue on top of City Hall looked out over a declining metropolis: smoky railroad yards, slummy neighborhoods, junky business streets and a dilapidated Delaware River waterfront. Most of the town's "best" people had fled long ago to the Main Line suburbs. Its retailers, the life force of any center city, saw a decline in sales, profits and customers.

Like every beleaguered Northeast city, Philadelphia is still contracting—with a net loss of more than 46,000 jobs in this decade, out of 800,000—and is feeling the reverse growing pains of the shift from manufacturing to service industries. It still has slums, and the federal government is after it for dumping all manner of waste into the Delaware.

Big changes in the fourth biggest city

But to the west of City Hall it now has Penn Center and Centre Square, two handsome clusters of office towers. (At the urgent behest of Edmund Bacon, who for 21 years was executive director of the City Planning Commission, none of the towers was allowed to rise higher than the 511-foot-high base of Penn's statue.) Hispanics being an important fraction of present-day Philadelphia's population, Walter D'Alessio, who runs PIDC, has been working hard on creation of a several-acre Spanish-American food distribution center off to the north. With inducements from the city, the Fairmont corporation, proprietor of the San Francisco hostelry of the same name, will manage the ill-fated Bellevue-Stratford Hotel, closed after the "Legionnaires' disease" outbreak. It will reopen in September, after a $20-million ren-

ovation job, as Philadelphia's own Fairmont Hotel.

It hasn't been easy to change the image, much less the fabric and structure, of the country's fourth largest city. It has taken more than three decades of hard work by people who thought Philadelphia worth fighting for. A lot of the change has been wrought by the PIDC, a unique but by now much-copied amalgam of private and municipal effort and money aimed at selling real estate parcels at subsidized prices for old and new businesses to move into. So far PIDC has sold more than 1,200 acres to customers who otherwise might have settled elsewhere.

"In this city," says D'Alessio, "homeowners are in an enviable position because the big tax bite is on businesses. Of course businesses don't like surprises, like 'we're going to do homes for tent caterpillars,' " but they can be convinced that changes, even expensive ones, can be in their self-interest.

Displacement, a problem that won't go away

For a time the city's most striking, more-than-cosmetic change of face was at Society Hill, an unslummed neighborhood where 50,000 people, mostly upper-income, have occupied graceful brick town houses. (There are some high-rises with middle and lower income tenants.) Lanky, 68-year-old Ed Bacon, who lives in Society Hill with his family, takes a paternal pride in leading visitors through its photogenic gardens and meandering brick walkways—as he should, being the spirit behind the rejuvenation. He is concerned, but philosophical, about the poor who had to be displaced from Society Hill, figuring that "you have to start somewhere" and this, at some human cost, was a proper place to start making over center-city residential areas.

Some of the displaced persons moved south to Queen Village, a neighborhood that for years was headed down, down, down, but then—being discovered by white pioneers as a handy, close-in rehab-able place to live—became a displacement problem in itself.

Downtown Philadelphia got a $100-million shot in the arm last year with completion of The Gallery at Market East. A four-level, climate-controlled retail bazaar linking a new $35-million Gimbels and the Strawbridge & Clothier flagship store (refurbished for $12 million), it has 125 shops and restaurants and its own graffiti-free subway station. A colorful, bustling place, it draws droves of shoppers—even at night and on Sundays—and is doing better than $200 a square foot a year in business, a figure that in retail circles amounts to a smashing success.

To Bacon, the planner, The Gallery epitomizes the qualities ancient agoras had and that he feels a modern downtown should have, "energy, excitement, den-

Displaced from her old Society Hill home, Mable Dodson, 83, has been moved to a walkup flat (below).

sity," in other words what Jane Jacobs, in *The Death and Life of Great American Cities,* called "close-grained diversity." As she wrote back in 1961, "We badly need more, not fewer, city landmarks," and The Gallery qualifies as a great landmark.

It was also a great gamble. Says M. Todd Cooke, who runs the Philadelphia Savings Fund Society: "From a banker's standpoint it's nondebatable that Market Street East and The Gallery were high-risk. Market East had a bad reputation that it's only now shucking. It was pretty raunchy." But C. Stockton Strawbridge, whose big store is on Market East, got James Rouse, the shopping-center and new-town impresario, committed to running the landmark-to-be.

"Retailing today," says Strawbridge, "is theater, as well as being dog-eat-dog." The Gallery suits him fine, being highly theatrical as well as a highly competitive retail complex. Cooke also had a vested interest in the scene, which was two blocks down the street from his own 36-story headquarters building, but it was only after he came forward with a capital commitment that other local bankers went along with money to help finance The Gallery.

Because the city put more than $30 million into a parking garage and other amenities there, The Gallery has been boycotted by cohorts of Milton Street, a resourceful North Philadelphia black. Street thinks Philadelphia should shore up rundown neighborhoods like his own, before putting so much taxpayers' money downtown: "They've put little if any money in black neighborhoods," he says. "Partly it's the antiblack attitude of [outgoing Mayor Frank] Rizzo."

Street, who has just won a seat in the Pennsylvania House of Representatives, is not to be dismissed as just another sorehead. Two summers ago he sponsored a "Walk-in Homestead Program" in which 300 families took over some of Philadelphia's 20,000 vacant homes, many foreclosed by the federal Department of Housing and Urban Development. Their way past the padlocked front doors was opened by what Street called his master keys—bolt cutters.

"Our intention was to occupy and preserve housing stock for some of the 160,000 families here in need of housing aid," he says, "and also to cut down on vandalism. It worked; 250 of the families are still there."

Milton Street's boycott of The Gallery, where a third of the customers are black, did cut business there and called attention to his point of view, which is that the city should be reviving itself from the outside in, rather than from downtown out. But you have to start somewhere, as Bacon says, and at least Philadelphia's center city, if not its dozens of surrounding neighborhoods, has been proving W. C. Fields wrong.

Much of the foregoing sounds hopeful, and is. And it is a once-over-lightly, for many old Eastern cities are fighting hard to survive. Boston's Faneuil Hall Marketplace, a small but mighty retail complex, is outdrawing Disneyland and sparking a new spirit in the city. After a decade of delay, New York has finally broken ground for its Battery Park City on the Hudson River near the World Trade Center, at the foot of Manhattan, and in one more decade 40,000 people will live there.

Thanks to Arthur Ziegler and his History & Landmarks Foundation, Pittsburgh (where housing admittedly used to rank "amongst the worst" in the nation) has been sprucing up everything from an abandoned railroad terminal to the historic houses of the Mexican War streets, so-called because they are named for battles and generals of that conflict. Spotty progress is better than none.

Some people remain stubbornly optimistic and one of them is Jim Rouse, who got the Faneuil Hall Marketplace in Boston and The Gallery in Philadelphia going, and has 33 shopping centers around the country and the new town of Columbia, Maryland, south of Baltimore, to his credit. "All the little, piecemeal things now begin to add up," he says. "In time they will amount to a quantum change in American life. The center city is vigorously on the way back, a very satisfactory place for millions of younger people who don't look forward to the acre lot, the ride-on mower and the barbecue.

"The city works well for such people, and in time the laggard areas—housing and retailing—will get taken care of. By the year 2000 the obsolete part of America will not be cities, but suburbs. You'll see."

Bacon (left) and Banker M. Todd Cooke on a lower level of Philadelphia's downtown Gallery.

Marianne

"CERTAINLY IT'S THE BEST EUROPE IN A LONG WHILE."

*The sedan that Road Test Magazine is talking about does not sell for $20,000. It does not sell for $15,000. It sells for a base price of $8995.**

This pleasantly surprising contradiction between the test results of the Audi 5000 and the price has been pointed out by several automotive publications.

Read these excerpts from the Road Test report on the Audi 5000 that appeared in the January, 1978 issue:

"At freeway speeds the ride is serene and smooth, there is no mechanical noise, and no wind noise. You get bored, turn on the radio, and just drive—until you glance down at the gauges and notice that you're making 85 mph. It's sneaky; it'll fool you if you don't pay attention. It'll also nip in and out of traffic like a much smaller car, thanks to the way it responds to its controls..."

"It may just be the ultimate sports sedan."

"...not only does the 5000 have a 5-cylindered mill, but it's got one that sips gas like a four,** makes horse-

*Suggested retail price $8995 P.O.E. Transportation, local taxes and dealer delivery charges additional. Fully equipped "S" model $10,575.

SEDAN TO COME FROM

—ROAD TEST MAGAZINE, ON THE AUDI 5000

power like a six and feels nearly as smooth as an eight."

"...the price...isn't near as much as some of the 5000's closest competitors sell for. That, of course, is the name of the game, and Audi is playing it to the hilt with development of solid concept and good attention to detail. They're going to sell every one of these cars they can screw together."

"...the 5000 has an incredible heater/air conditioner that could heat half your house, or could freeze your—um, toes off, depending on which button is pushed."

Test drive the 1979 edition of the Audi 5000 at your Porsche + Audi dealer and see if it isn't so.

**26 mpg highway, 16 mpg city, std. transmission. (EPA estimates. Actual mileage may vary based on how and where you drive, car's condition, and optional equipment.)

PORSCHE+AUDI

Nothing Even Comes Close

Lygus bug (magnified 12 times) attacks alfalfa, but pesticides that kill it may benefit other pests.

By Daniel Jack Chasan

How ya gonna keep bugs down (on the farm)?

As insects increase in numbers despite chemicals, Integrated Pest Management is farmers' new weapon in war of wits

The dusty white pickup stops at the edge of a pear orchard by the Sacramento River, and the driver, a slim man in a striped shirt, climbs out and takes a "sweep net" from the back. He carries the net to a weedy patch past the last row of trees, swings it through the weeds several times, and upends it. Out tumble a pile of grass seeds and several angular green stinkbugs—exactly what he was looking for. He squashes the stinkbugs underfoot, and swings the net through the weeds again. He finds more bugs. A processor who spots stinkbug damage in a truckload of pears can reject the whole batch.

Conventionally, anyone who discovers the bugs in an orchard simply sprays the orchard in order to kill them. But the man with the net isn't doing things the conventional way. He is a 32-year-old agricultural consultant named Patrick W. Weddle (opposite), and he is a practitioner of a system called Integrated Pest Management (IPM), in which one does not simply spray. Instead, just as Weddle is doing, one looks closely to see what the problem is, then chooses an appropriate way to deal with it. The appropriate way may be spraying, but it may well be something else.

Weddle's presence in the pear orchard portends an agricultural revolution in which cadres of IPM advocates—and an opposing army of pesticide salesmen—are trying to win the hearts and minds of American farmers. For the last 30 years, the farmers have relied increasingly on spray rigs and crop dusters to dramatically increase yields, although they are still protecting

only 12 percent of U.S. cropland this way. Now, however, they are confronted with a startling fact: after three decades of warfare, the pests seem to be prospering. While farmers now use more than ten times the amount of insecticides they used 30 years ago, nearly twice the percentage of their crops are destroyed before the harvest.

As a result, some farmers have begun listening to IPM consultants like Pat Weddle, who may begin by explaining the ecology of a pest, identifying its predators and parasites, assessing its potential for damage, and who may end by telling the farmer more than he wanted to know. But the advice of IPM consultants has often proved remarkably profitable, and more and more farmers are beginning to take it.

This advice may range from sophisticated new techniques of biological control, to simple changes in farming practices. Farmers are now controlling some insects by releasing sterile males into their populations to prevent reproduction, and monitoring others by trapping them with artificial pheromones, chemical scents which mimic their own sex attractants. They are protecting crops by releasing bacterial, viral or fungal diseases—and insect predators and parasites—which attack only specific targets. And they are experimenting with synthetic hormones which keep insect larvae from maturing into plant-eating adults, or which, if the larvae themselves are plant eaters, turn them into premature adults.

Less exotic, but often as ingenious as these new techniques, are some of the farming practices IPM advisers recommend. Cotton crops have been protected from pests which prefer alfalfa by planting strips of alfalfa as a decoy crop among the rows of cotton. Some bugs have been outwitted by delaying the planting of a crop long enough to assure that they mature before the crop, and find very little to feed on, or by switching to a crop with a shorter growing season. The latter technique, now used in Texas cotton fields, allows farmers to harvest their cotton before the enemy matures. The farmers also have modified irrigation, fertilization and other cultural practices. As a result, growers have cut down on chemical costs and crop damage. They produce less cotton per acre but wind up with more money in their pockets.

Farming today is above all a business, so the ultimate selling point of IPM must be its ability to translate good ecology into sound economics. Proponents of IPM say that it saves farmers money, sometimes a lot of money—and in many cases it increases yields as well as profits. The U.S. Department of Agriculture

Daniel Jack Chasan is a frequent contributor to SMITHSONIAN. *His most recent book,* Up for Grabs, *is about conflict over natural resources.*

Pat Weddle taps pear branch, knocking beneficial bugs, and pests, onto muslin "beating sheet" for analysis.

Researcher in Andrew Gutierrez' lab counts lady beetles on alfalfa. Data are fed to computers.

Photographs by Christopher Springmann

New breed of insect managers

Liane Enkelis

At rally addressed by the late Robert van den Bosch, protester denounces paraquat, which is sprayed on Mexican marijuana (its residue is hazardous to health).

(USDA) estimates that by 1986 IPM may be used on more than 100 million acres of American cropland, which could result in an annual pesticide savings of some $1 billion.

Ecology and economics, on a smaller scale, are very much on Pat Weddle's mind as he surveys the stinkbugs in that Sacramento Valley pear orchard. Looking at the ones he has collected in his net, he sees that they're all adults; therefore, they haven't grown up in the orchard, but have flown in from nearby fields, settled down in the weeds and made forays into the orchard from there.

Weddle looks around at the patch of weeds shielded by an embankment and says, "This is ideal for stinkbugs: warm, humid, protected. We can spray till hell freezes over and it may not do a bit of good. The grower has to find some way of coming in and getting these weeds out. He knows it. We've talked about it. I guess he figures the fruit damage will cost him less than getting rid of the weeds."

A panacea didn't pan out

The kinds of calculations that Weddle and the grower have been making—what you really have to do to get rid of the bugs and whether or not it's worth doing—lie at the heart of IPM. The system is sometimes thought of and discussed as an alternative to the use of chemicals. Actually, it is more accurate to describe IPM as an alternative to their *indiscriminate* use. How much and what kinds of use are indiscriminate will get you an argument.

The USDA began using the phrase "integrated pest management" and subsidizing pilot IPM programs in 1972. Like many other events of the late 1960s and early '70s, the formal advent of IPM was largely a reaction against ways in which American society and the economy developed after World War II. DDT and other poisons that came into general popularity then were considered panaceas and became the basis of a big business—one that by now is estimated at around $5 billion a year. Salesmen called the shots in this war, advising the farmer on the use of sprays, often working out with him in advance a schedule of spraying for the entire season. A lot of bugs were killed every year, and American yields per farm worker continued to rise. But so did the numbers that had to be killed.

What went wrong is easy to see, in retrospect. DDT and the synthetic rain of pesticides which succeeded it offered a simple technological fix for an ecological problem as complex as evolution itself. As a way of eradicating insects once and for all, the chemical strategy never had a chance. Insects have been around for at least 300 million years, long enough to develop some highly adaptable and prolific ways. Some pro-

duce enormous numbers of offspring; others can go through a new generation every week. Our crop plants would never survive the ravages of this varied horde if it were not held in check—in large part by other insects, natural enemies whose numbers rise and fall along with the harmful populations. The armies involved in this natural balance can be truly amazing: each year in California, as a small example, some 7.5 billion lady beetles feed on 3.75 trillion aphids in alfalfa fields, which cover just 1.4 percent of the state.

When a pest population gets ahead of its natural enemies, enough to seriously damage the farmer's crops, a chemical can reduce its numbers quickly and effectively. While the balance of nature may suffice in a meadow, a farmer's field or orchard is an unnatural community of plants designed to produce a high yield of a single crop. As such, it is highly susceptible to insect infestations, and chemicals often are essential to protect the crop from more damage than the farmer can afford. But used indiscriminately they can also produce other consequences—for example, kill off an array of beneficial insects which have kept other plant eaters from becoming a problem. The result is often a secondary outbreak, which can do more damage to the crop than the first pest would have done if left alone. And the first, rebuilding its population from a few resistant individuals, may swarm back over the crop with no natural enemies to control it—requiring the use of a new chemical. In short order, the farmer is faced with more—and more kinds of—pests than existed before he started spraying.

Bollworms won't bite the dust

In the cotton fields of California's San Joaquin Valley, for example, repeated spraying aimed at controlling lygus bugs destroyed the natural enemies of the bollworm, which devastated the cotton crop later in the season. Bollworms, it turned out, were already resistant to most pesticides, and hard to spray because they bore into the plants they destroy. IPM advisers found that the farmers were spraying for lygus bugs in midseason, after the larvae had developed, when it was useless. They recommended spraying for lygus bugs only early in the season, and only in heavily infested fields. Farmers who did this preserved the bollworm's natural enemies and virtually eliminated the problem. Here was a classic example of a "pesticide-induced" problem, and of an IPM strategy designed to solve it.

Far from greeting IPM with open arms, farmers were at first highly suspicious, seeing it as another attempt to deprive them of their arsenal of pesticides. Farmers and agricultural scientists, having reaped praise for their prodigious crop yields in the years

IPM gadfly van den Bosch kept a locustshaped kite on his office wall and a lady beetle mug in hand.

In grove of academe, Berkeley professor Carl Huffaker ponders lessons in Chinese successes with IPM programs.

New breed of insect managers

after World War II, were suddenly on the defensive when Rachel Carson's *Silent Spring* aroused public concern in 1962 and sparked a crusade against DDT. Its ban as an environmental hazard a decade later brought howls of protest from the farm belt, along with predictions of declining crop yields and income. But results have begun to allay these fears. The USDA reported that, in 1975, yields increased in 18—and profits in 24—of 25 programs applying IPM to cotton, peanuts and tobacco. Similar successes have been seen with most other major crops and with a variety of pests—insects, weeds, plant pathogens and vertebrates such as mice. Today, there are probably more people publicly approving of IPM than actually practicing it. President Carter and Secretary of Agriculture Bob Bergland have both given IPM their rhetorical seals of approval, and Bergland has declared it an official USDA policy. The department's extension service budgeted $5.4 million for IPM in fiscal 1979.

IPM is "kind of a buzz word now," says Pat Weddle. "If I go to meetings at the state or the national level, most of the people there are not pest managers, they are bureaucrats. IPM may sound glamorous," Weddle adds, as he carries a long pole pruner through the high grass between two rows of pear trees, "but the heart of it is this tedious walking through the fields, day in and day out."

The country that has the most people out there walking through the fields, day in and day out, is not the suddenly aware United States but the People's Republic of China. Dr. Carl B. Huffaker (p. 81), director of the University of California's International Center for Integrated and Biological Control at Berkeley, recently visited China with a group of other American entomologists.

Six hundred people to herd ducks

There is no doubt, he says, that China is ahead of us—and everyone else—in IPM. To begin with, the Chinese grow many strains of pest-resistant plants, developed Lord-knows-how by Lord-knows-whom, sometime in the unremembered past. Then they treat their plants with extraordinary care. Big bamboo combs may be used to scrape the bugs off rice plants before they're put into the ground. People walk through the fields constantly, looking for signs of pests. If they find something, they put up a flag to mark the spot; spray will then be applied not to a whole field or even a whole row, but only to the marked spot. One commune Huffaker visited employed 600 people just to drive ducks into rice paddies to eat bugs and weeds (eventually the people sell or eat the ducks).

The Chinese also use various methods of trapping to destroy pests and release vast numbers of parasites for biological control. With this system China manufactures only about 100 individual insecticides, and relies mainly on seven of the least hazardous, while the United States has developed an estimated 21,000.

Obviously, Huffaker points out, no one in this country, given American labor costs and the market economy, is going to employ 600 people to drive ducks. But if IPM is to take hold, he says, "we'll need an army of people to do the necessary technical monitoring in the fields."

Swinging net through alfalfa, Gutierrez practices "ecosystems analysis" (*i.e.*, searches for bugs).

HOW TO FIND WHAT'S RIGHT FOR YOU IN ALASKA.

Look over the industry's largest, most varied selection of Alaska vacations: 37-7-day cruises through the Inside Passage, 21 tour itineraries covering all Alaska, and over 500 departure dates from May-September.

Choose from an incredible list of adventurous options: excursions that take you to the Eskimo Arctic or the farthest reaches of the Pribilof Islands in the Bering Sea.

Learn what to expect in Alaska, from the wildlife you'll see, to the weather, the shopping, and what clothing to bring.

Get our 48-page brochure and map, specifically designed for planning your Alaska vacation. See why twice as many people tour Alaska with Westours.

Find all the color and excitement of Alaska, from cosmopolitan Anchorage to awesome Mount McKinley to the immense, calving Columbia Glacier, and create your own personal Alaska experience.

Our forty-eight page brochure and map is also available from your travel agent.

SEND ME THE MOST COMPLETE ALASKA PLANNING BROCHURE EVER PRODUCED.

Simply fill out this coupon and mail to Westours, 100 W. Harrison Plaza, Seattle, WA 98119. We'll send you everything you need to plan your Alaska vacation. Westours

Name

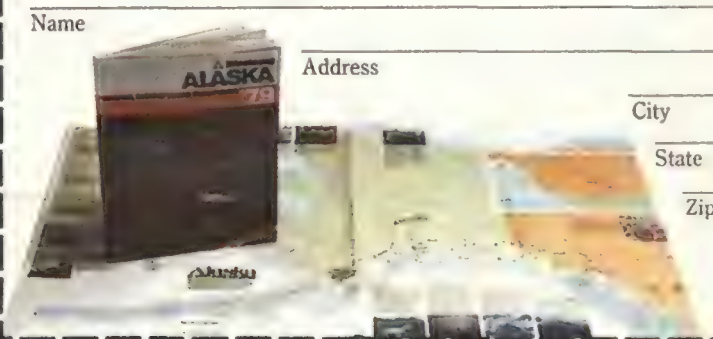
Address

City

State

Zip

AKSM-1



Pour over all the details of cruising Alaska's Inside Passage and Glacier Bay, aboard the Prinsendam or Veendam.

Discover that Westours' M.V. Fairweather is the only daylight cruise of the Lynn Canal, the most beautiful 100 miles of the Inside Passage.

Prinsendam registered Netherland Antilles; Veendam, Panama.

New breed of insect managers

Expanding IPM, says Dr. Ivan J. Tomason, director of the University of California's statewide IPM program at Riverside, "requires changing the basic philosophy of how we try to protect crops." Even in theory, eradicating a pest may be a bad idea—this will starve out its natural enemies. Then if it reinvades the area there are no natural controls. IPM aims to hold pest numbers to tolerable levels, says Thomason. There must be, he thinks, a "change from the idea of a 'final solution' to the idea that we're going to go on living with them."

Dr. Donald E. Mock, a Kansas State University extension entomologist who helped run a pilot IPM program in western Kansas, believes that the main triumph of the past five years has been nothing more or less than weaning farmers away from the basic reflex of revving up the crop duster. The old attitude, he recalls, was "spray it every July 20th and you'll kill some bugs. In 1973, I'd get a typical call from a farmer who'd ask, 'What should I spray my sorghum with?' I wouldn't know if he had bugs or worms or what. It never was very smart to base your spraying on the assumption that there might be something out there doing harm. Now, a farmer will call and say, 'I've got western bean cutworms laying eggs in my corn and I've got an egg mass on every fourth plant and the corn hasn't started to tassel yet—do you think I need to spray?' "

Mock, like many others involved in the federal government's IPM program, hastens to explain that he's not against spraying per se. There is "a common misbelief among environmentalists that there is a successful alternative to chemicals for any problem that comes along," he says.

The degree to which IPM can reduce their use—and the degree to which it stands in opposition to the corporations which currently market the chemicals—is certainly the most controversial aspect of the program. The controversy goes far beyond the bounds of entomology or any other science. But at its center was an entomologist, Dr. Robert van den Bosch (p. 81), chairman of Berkeley's Division of Biological Control until his death in November. Van den Bosch contended the big chemical companies know quite well that it is scientifically—and, in the long run, economically—unsound to develop broad-spectrum pesticides and encourage their use at every opportunity. But faced with high-development costs for any pesticide, specific or general, and with relatively short patent lives, many companies strive for broad applicability and quick sales in order to increase their profits. Van den Bosch also criticized the widespread system in which professional advice and chemical pesticides are dispensed by the same person.

Van den Bosch's arguments aren't heard everywhere—even among IPM advocates. There are sharp divisions of opinion among people working on IPM, Ivan Thomason says, but in the center there is general agreement that the new approach will require detailed knowledge of the many complex interrelationships among plants and pests.

Applying IPM on a large scale, Thomason believes, also "depends on a much more sophisticated technology" than most farmers currently employ, one based on research by a whole new breed of agriculturally oriented biologists. The kind of research he envisions is already being done by another Berkeley entomologist, Dr. Andrew P. Gutierrez (p. 82), who is currently investigating cotton and alfalfa ecosystems. Walk into one of Gutierrez' labs and you may find someone watching lady beetles crawl among a group of alfalfa stems, taking notes on exactly where and how often the beetles move from stem to stem (p. 79). Walk into an adjoining room and you may find a researcher working beside a computer terminal. In Gutierrez' office itself, a thick pile of computer printouts describes cotton growth and development in the field. A long series of graphs shows the normal "shed" or dropping of bolls by a cotton plant under varying conditions at various times of the year, plus the "shed" of the same plants if pests are present. The differences in amplitude between maximum growth curves and those reflecting insect damage give a precise measurement of crop loss. "It's a new science," says Gutierrez of this integration of field and lab work with extensive mathematical analysis of plants and insects. "Before, entomologists just studied . . . bugs."

Aerial spray pickles pests that peck at peppers, but also picks off bug-preying predators and parasites.

CAPERCAILLIE

SHOWN SMALLER THAN ACTUAL SIZE (9" DIAMETER)

Announcing a most important new porcelain plate collection...

GAME BIRDS OF THE WORLD

by Basil Ede

© 1978 FP

An extraordinary series of twelve collector's plates by Europe's foremost wild bird portraitist... his *first* works of art in porcelain.

Each of the twelve plates bears a new and original work created by Basil Ede exclusively for this limited edition.

Available by subscription only.

The subscription rolls close: January 31, 1979.

REDLEGGED PARTRIDGE

THE ARTIST. Basil Ede, of Sussex, England, has been called "the outstanding wild bird portraitist of his generation, and perhaps of his century." He is widely regarded as Europe's most distinguished bird artist. Indeed, the authority of his style and the distinction of his work have profoundly influenced the way birds are portrayed by artists throughout the world.

After notable exhibitions in London and other major European cities, Basil Ede was honored by a one-man show at the Smithsonian Institution's National Collection of Fine Arts in Washington, D.C. This was followed, during recent years, by important exhibitions at New York's famous Kennedy Galleries.

His paintings have been commissioned by the National Audubon Society and the World Wildlife Fund, among others. And he is represented in many prominent public and private collections, including the collection of HRH Prince Philip, Duke of Edinburgh.

Now, at the height of his career, Basil Ede has created his *first* works of art in fine porcelain—*Game Birds of the World.* A series of twelve collector's plates portraying the beauty and grace of game birds in precise, authentic detail and with his own inimitable flair for color and composition.

Each of these twelve plates is, in itself, a masterful work of art. Together, they form an incomparable collection that will be a proud acquisition for every subscriber . . . a focus for conversation and admiration when displayed in the home.

THE GAME BIRD PLATES. The plates will be crafted for Franklin Porcelain in France, by the world-renowned firm of Haviland of Limoges.

CHINESE PHEASANT

The exceptional translucence and whiteness of Limoges porcelain are ideally suited to bring out the subtle colors of Basil Ede's art.

And the plates will be large in size—9 inches in diameter—to provide full scope for Ede's finely detailed portrayal of game birds in their natural habitat.

The jewel-like quality Ede brings to the birds' plumage . . . the delicate hues of each bird's protective coloration . . . the wonderfully natural colors of its environment . . . all will be captured *exactly.*

Franklin Porcelain has devoted more than two years to meticulous preparation for the issuance of these plates, and every detail will be of the highest quality. For example, each plate will be hand-decorated with a border of pure 24 karat gold, perfectly proportioned both to the size of the plate and to the scale of Basil Ede's art. And each plate will incorporate as many as sixteen separate ceramic colors. Only through such perfection of detail could the standards of Basil Ede and of Franklin Porcelain be satisfied.

Ede's very beautiful and marvelously accurate works of art—created especially for this issue and available only on these fine porcelain plates—make this a collection that will be enjoyed and prized by all who love the beauty of birds, of art, and of porcelain.

And, as the *first* works in porcelain by Europe's leading painter of birds, this is a collection clearly destined to have lasting importance.

THE LIMITS OF EDITION. The *Game Birds of the World* porcelain plate collection will be produced only once and in strictly limited edition, with an absolute closing date of January 31, 1979. The plates will be crafted exclusively for individual subscribers. And the limit of one collection of Game Bird Plates per subscriber will be enforced without exception.

Thus, the total number of sets to be issued will be forever limited to the exact number of original subscriptions entered by January 31, 1979, plus one set for Basil Ede and one for the archives of Franklin Porcelain.

Since the plates will not be sold separately and will not be made available for original sale through dealers, the original subscribers and the artist will be the only people in the entire world who can acquire this collection. In the future, any dealer who may wish to offer these plates to a client, or any collector who may wish to acquire these plates at that time, can only hope to obtain them from one of the original subscribers.

SUBSCRIPTION DEADLINE: JANUARY 31, 1979. The collection will be issued to subscribers at the convenient rate of one plate every other month. The original issue price of just $55 per plate will include specially written reference material and special display stands for all twelve plates in the collection. And a Certificate of Authenticity will accompany each collection.

There is no need to send any payment now. But the subscription application below must be mailed to Franklin Porcelain, Franklin Center, Pennsylvania 19091, no later than January 31st to be accepted.

SUBSCRIPTION APPLICATION

GAME BIRDS OF THE WORLD

A Limited Edition

Must be postmarked by January 31, 1979.
Limit: One collection per subscriber.

Franklin Porcelain
Franklin Center, Pennsylvania 19091

Please enter my subscription for the *Game Birds of the World* porcelain plate collection, bearing original works of art by Basil Ede and crafted in fine Limoges porcelain.

I need send no payment now. The twelve plates are to be sent to me at the rate of one plate every other month. I will be billed for each plate in two equal monthly installments of $27.50*, with the first payment due in advance of shipment. **Plus my state sales tax*

201

Signature _____
ALL APPLICATIONS ARE SUBJECT TO ACCEPTANCE.

Mr.
Mrs.
Miss _____
PLEASE PRINT CLEARLY

Address _____

City _____

State, Zip _____

By Bennett Schiff

In a tobacco city the arts are put in place—out front

R. Philip Hanes jr. brings experience and business acumen, plus sensitivity, to the cause of the arts.

Winston-Salem was a creative pacesetter for developing the arts in community life and it is continuing to explore the way

Being in Winston-Salem in the western Piedmont of North Carolina, widely known as tobacco country, is, as you experience it cumulatively, not that different in feeling from being in Pamplona for the running of the bulls. It is that festive, that devoted to what is happening, that spirited and, in fact, that inspiriting.

The central event is of course very different unless you are one who places bullfighting, in the Hemingway sense, among the arts. This communal event, however, is purely and clearly focused on the visual arts, as the entire city of 141,600 seems to be throughout the entire year on all of the other arts.

Since we are reminded somehow by Winston-Salem of the smaller European cities of other times, it is not a disparate thought to be reminded of Siena in, say, the 14th century. We are not speaking of architecture or of genius, but of the spirit of a place with regard to the arts and to artists and the welcome place of the arts within the daily lives of citizens.

You could have found no better or more explicit expression of this than to observe what was going on in the spacious, airy city in the latter part of last year.

Here are Mary Anne Tighe, deputy director of the National Endowment for the Arts; Howard Klein, director of arts programming for the Rockefeller Foundation; Mrs. P. R. Norman, member of the International Council of the Museum of Modern Art; Milton Esterow, editor and publisher of *Art News*; art patron and documentary film maker François de Ménil; Peter N. Kyros jr., deputy chairman of the Federal Council on the Arts and the Humanities; Stephen Prokopoff, director of Boston's Institute of Contemporary Art. Here are New York art dealers Bella Fishko and André Emmerich, who show very different kinds of art indeed, but all of it estimable. And here is Joshua Taylor who runs one of the most intelligent, instructive and sensitive of the country's museums, the Smithsonian's National Collection of Fine Arts.

Why are they here?

Because, and it is a considerable fact in the creative life of the country, Winston-Salem was a pacesetter, the leader of community involvement in the arts long before the National Endowment for the Arts had any hope of getting started.

They are here at this time not because of this—it is already established history—but because of the continuation of the idea into the fabric of the place. Most importantly, they are here because of the work being done throughout an entire region of the country as promoted and shown by this city. They are here to participate in and pay tribute to creative quality, an activity which can make you feel very good indeed.

Winston-Salem, then, is doing two essential things. It is giving young artists of quality an opportunity to be seen regionally. And it is bringing their work to the attention of knowledgeable people who might otherwise, would otherwise, be unaware of it.

Bennett Schiff is on SMITHSONIAN*'s Board of Editors.*

Around sculptor James Hagen's *Window*, on art center grounds, are six of the Southeast Seven artists, (one was away), and collagist Irwin Kremen, in black shirt, whose one-man show was installed on balcony. Others are Southeastern Artists Fellowships recipients: from left, painter Whitney Leland, winner of National Collection of Fine Arts purchase award; photographer Elizabeth Matheson; painter Alexandra Kleinbard, on top; sculptors Wayne Hall, below her, Richard Craven and Andy Nasisse.

Photographs by Yoichi R. Okamoto

From rear of new SECCA building, a huge glass wall faces Open Air Gallery in building composed of five joined triangles. When first begun in 1956, the center was housed in an old piano warehouse.

It is doing this programmatically through an organization and gallery called the Southeastern Center for Contemporary Art (SECCA), which presents the work of regional artists in a handsome, thoroughly professional and spacious gallery. It is not a museum —although it is big enough to be a small one—because it does not have a permanent collection. Nor does it intend to acquire one. Its emphasis is on showing and selling the work of young professional artists.

The big event of the year for SECCA, and the one for which the outlander visitors arrived, was the second annual juried exhibition of the work of seven artists from the Southeastern region, each of whom had been awarded a $2,000 fellowship. They had been chosen from more than 1,000 applicants by a panel consisting of Marcia Isaacson, a previous year's fellow herself, who works and teaches at the University of Florida in Gainesville; Stephen Prokopoff; Dianne Vanderlip, curator of contemporary art at the Denver Museum of Art; and SECCA director Ted Potter.

The design and purpose of the fellowships demonstrates what SECCA is all about for they were cosponsored by the National Endowment for the Arts, with matching funds provided by the CIBA-GEIGY Corporation. So, SECCA has been able to combine federal money with its own to use for the advancement of artists native to the region. And it has obtained private money as well.

Probably, within the world of arts management—which is becoming more and more bureaucratic and more like any other world each day—what is the secret and wisdom of SECCA is its plain and pure respect for the individual artist.

In addition to the Southeast Seven II exhibition, there was a show of intricately delicate and precisely balanced collages by Irwin Kremen (p. 89), an assistant professor of psychology at Duke.

And there was a conference of artists, the SECCA board, and representatives of regional artists' organizations, including artists Benny Andrews from New York, Robert Irwin from Los Angeles and Richard Harcourt, president of Western States Arts Foundation, from Denver. What they talked about was how to do more of this: more regional and local disposition of federal money, more interrelated activities of regional groups from all over the country, more good treatment for artists, more opportunity for good work to become known.

View from balcony on the night that the purchase award was announced. Cross sculptures on left are Craven's; paintings, front and right walls, by James Herbert; sculpture, foreground, by Hall.

For Joshua Taylor, "SECCA is performing the kind of service that I hope will be emulated more and more throughout the country. At a moment when artists feel free to work in many different ways and places of their own choosing, it is important that they are given local support. It is equally important that they be given national recognition—our particular interest.

"American art can only profit from diversity of creative, impulsive and distinctive points of view. The idea that this might produce a new regionalism as in the 1930s is nonsense; the artist, the patrons, the public are now all too aware of the larger ranges of art to be satisfied by local illustration. The artist working in his own way helps to make the region what it is, not reflect it."

Taylor was in Winston-Salem to choose a work from the exhibition for the National Collection through a $5,000 purchase award given by the Ford Foundation. This he did with pleasure (but not so great as that of the chosen artist) and then went on to purchase, out of National Collection acquisition funds, still another work of the same artist on display, Whitney Leland of Knoxville, Tennessee.

Mary Anne Tighe, an art historian and author, who went from Vice President Mondale's staff, where she was art adviser, to the Arts Endowment, is also appreciative—in a hardheaded and practical way, which befits, you think, a dispenser of government money, but also in other ways—of Winston-Salem. She says:

"The Arts Endowment deals with lots of cities each year and tries to get art more deeply into the consciousness of the business people and politicians.

"We stress the practical, but Winston-Salem is the only American city I have been to where they've gone beyond this. The corporate executive, the business community, the politicians and the man in the street —in fact, the whole community—go beyond the first level interest in the arts, *i.e.*, practical appreciation. Art is on people's lips and on the front page of the newspaper, not just in the arts section.

"Phil Hanes shows you the way in which one person can stimulate a community. He had the kind of vision that can show a community where it is going. He has even affected the artist.

"The only other thing I want to say is that I was very impressed with the ease with which these people talk with each other. Artists and corporate people are able to communicate easily. Often you go to an open-

Joshua Taylor, director of National Collection of Fine Arts, has a close look at a Kleinbard work.

Buffet was at home of Ted Potter (right center, facing camera). Joan Hanes is lower right; Mary Anne Tighe, center, in pink; McChesney Dunn, of SECCA, left.

ing and see the artists talking to artists and the business people talking to each other. That barrier is somehow down in Winston-Salem."

As if to exemplify what Mary Anne Tighe was saying, here was Joseph F. Abely jr., executive vice president and chief financial officer of R. J. Reynolds Industries, and a board member of SECCA, to be sure, as at home in the gallery as any of the artists whose works were being shown. And it is consistent with the spirit of the place that Abely should be one of the prime forces behind the Piedmont Opera, a locally generated company which, with singers from New York's Metropolitan Opera, (for they do not believe in watering down the arts here, and whiskey only slightly), was presenting a full-fledged production of *Rigoletto* in the Reynolds auditorium, which has 2,000 seats. The sets, of course, would be the work of Winston-Salem's North Carolina School of the Arts, part of the University of North Carolina, a high school and college of the arts which is providing many of the working professional artists in dance, the concert hall and theater for the entire country.

If you are lucky, and endowed with something like the endurance of a polar explorer, Phil Hanes will be the one to show you around, beginning with the meticulous restoration of Old Salem, more than 50 mid-18th-century buildings which formed the original Moravian settlement in the area. And then, in some

order or other, the North Carolina School of the Arts; the Museum of Early Southern Decorative Arts, with 15 impeccably reconstructed and furnished rooms ranging from the 17th to the early 19th century; the handsomely designed shop of the Piedmont Craftsmen displaying contemporary craftswork of distinction and quality; Reynolda House, the former estate of R. J. Reynolds, now a museum and community cultural center with a fine collection of American art in a setting of comfortable splendor.

You will learn, painlessly, that there are four colleges and universities in the town. ("About 15 years ago," Hanes says in passing, "we decided we needed a university here. So, we went out and bought Wake Forest and moved it here, built a campus, put up the buildings, and had a university. A good one.") That the nation's oldest continuously operating brass band was formed here in 1778, that it is the site of the first chamber music composed in the country, that the area is outstanding for its collection of pipe organs, that the Moravian Church, through its music foundation, has a collection of more than 10,000 manuscript works, including the only known copies of four symphonies by J. C. F. Bach.

Pretty soon you will have forgotten that Hanes is a very substantial and successful businessman. Hanes got interested in activities supporting arts and artists in 1949, went into the Navy for two years, and really sank his teeth in the subject (ingested it, really) on his return. It is difficult to say whether he worked harder at the Hanes Dye and Finishing Company, of which he is chairman of the board, or community and national arts organization and administration. In any event, he did very well at both. And yet, he is with all that a man of engaging charm and naturalness, very easy to be with although he is working at every moment, and the embodiment of civility.

From piano warehouse to manor house

SECCA is lodged in an English manor house to which a modern gallery has been imaginatively joined, on a wooded estate of 32 acres endowed by James G. Hanes (R. Philip Hanes' uncle), and administered as part of a foundation set up by his son, Gordon Hanes. James Hanes willed that the estate be used for showing, promoting and encouraging "the production and creation of works of art."

SECCA began its activities in a piano warehouse in 1956. It moved into the Hanes estate in 1977 where it has, in and around a building composed of five joined triangles, some 10,000 square feet of exhibition space, plus large sculpture gardens.

Physically it is, of course, an excellent place for the showing of art but it is the concept of SECCA and

This picture was taken just as purchase award was announced, naming—to his surprise—Whitney Leland.

Leland is with purchase award of acrylic and Rhoplex. Painting went to National Collection of Fine Arts.

what it does that is most appealing to artists. And, it becomes clear why they feel that way in speaking with them and with Ted Potter, SECCA's resident director. "We're still involved," Potter says, "with a one-on-one involvement, a mutual respect. The staff understands that when an artist calls SECCA, he or she is put right through. No one ever asks who or why. We don't want to lose sight of identifying the artist and bringing him into contact with the public. And, we're trying to establish a network with other regions of the country; an exchange program, an attempt for more sharing of what artists are doing all over the country."

Noel Lee Dunn, a successful businessman who is president of SECCA, speaks enthusiastically about plans to do just that. "We're now involved," he says, "in computerizing information on all artists in the Southeast. We are planning to set up a microfiche system in the near future, in the next five years, so we can flash information all over the country to any city seeking it."

Frank Faulkner, 32, a painter now working in New York, says: "It's an oasis." Faulkner had been curator of exhibitions at SECCA in 1972. "Of course, I was a painter too and I got the encouragement of the place. I was really embraced by this community."

Andy Nasisse, 31, teaches ceramics and sculpture at the University of Georgia: "Of course, it's nice to have been chosen. When it comes right down to it, it's chance. After you've reached a certain level it's hard to say this person is better than any other. So,

Sculptor Wayne Hall's untitled work of wood and quarry stone frames SECCA president Noel L. Dunn, left, and board member Joseph F. Abely jr. At back, Kleinbard's *Three Women* and *Winged Warrior.*

I'm lucky to have been chosen. It's important to get exposure and recognition. I really appreciate that." He stops, smiles, and says: "It's a fantastic thing that they're doing this. It's great."

Irwin Kremen says: "It was time for my collages to live their own life. Many people whom I respect had urged me to show them. SECCA came to me, they found me, offered me a show and I said yes. Had they not come I would have kept my collages in their own little boxes."

Then, Wayne Hall, 30, a sculptor, says: "I'm real gratified to be able to get my work into a space like this and to have so many people look at it." Which is, when you think of it, the artist's essential statement and purpose, after all.

The Illustrated London News

A not-so-simple magazine for not-so-simple people.

For the past 150 years, readers of The Illustrated London News have been informed, entertained, and often challenged by this unique monthly. The test below is based on only a few articles that appeared in last month's issue. Even if you now read a news weekly and other special interest magazines, chances are the remarkable diversity of The Illustrated London News (editorial, art, travel, news, profiles, history, reviews), will both surprise and delight you. Every page of the way.

1. What is Latok 2?
   - ☐ a. Recently deposed king of Sri Lanka.
   - ☐ b. Soviet's newest fighter plane.
   - ☐ c. An un-scaled, 23,000 ft. mountain in the Karkoram Himalaya.
2. Albert Finney, Richard Briers, Peter O'Toole and Sir John Gielgud are alumni of
   - ☐ a. the London Academy of Music and Dramatic Art.
   - ☐ b. the Royal Academy of Dramatic Art.
   - ☐ c. the Central School of Speech and Drama.
3. Signing of the Nuclear Non-Proliferation Treaty by the U.S., Canada and Australia is likely to
   - ☐ a. threaten Britain's plans to reprocess Japan's used nuclear fuel.
   - ☐ b. heighten Western Europe's dependence on Eastern Bloc uranium sources.
   - ☐ c. encourage the development of more breeder reactors in Europe and Japan.
4. According to cartoonist James Thurber, the hardest part of his job was
   - ☐ a. thinking up the captions for the pictures.
   - ☐ b. thinking up the pictures for the captions.
   - ☐ c. convincing his wife he was really working as he stared out the window.

answers: 1. c, 2. b, 3. all, 4. c, 5. any.

5. Please enter my subscription to The Illustrated London News (12 monthly issues) for $20.
   - ☐ a. Check enclosed.
   - ☐ b. Charge my BankAmericard/Visa #_____, Expires:_____
   - ☐ c. Charge my Mastercharge #_____, Expires:_____
   - ☐ d. Bill me.

Name of Subscriber_____

Address_____

City/State/Zip_____

Sign Gift Card from_____

Or call toll-free (800) 621-5809 in Illinois (800) 972-5858. U.S. Subscription Center, Inc.®, 8831 Sunset Blvd., Los Angeles, CA. 90069 © 1978

SM6

The Illustrated LONDON NEWS

You may cancel your subscription any time and receive a full refund. The Illustrated London News.

By Farouk El-Baz

Naming moon's features created 'Ocean of Storms'

For centuries astronomers used conflicting names on lunar charts; Space Age multiplied problems

Galileo's first glimpse through a telescope gave us a whole new world to name. Now everybody who was anybody in science is there.

It all started with Galileo 370 years ago. When the great Italian scientist trained a crude telescope on the moon, he saw—and began mapping—the mountains, valleys and craters. He was the first to call the bright highlands *terrae* (the lands) and the dark regions *maria* (seas). And thus began the often tumultuous history of classifying and naming the features of the moon.

Galileo became caught up in conflict with the Church, but scores of astronomers followed his lead, observing and charting the moon. Each observer gave names to the features he observed and, by the end of the 17th century, more than 25 maps had been produced.

A 1645 map by a Belgian engineer and mathematician known as Langrenus, court astronomer to the king of Spain, named many of the 300 features shown for Spanish kings and nobles. A Danzig city counselor and astronomer who was called Hevelius chose names already used for terrestrial features: he named lunar mountain chains after ranges on Earth, for example the Apennines and Caucasus, and the crater we know as Copernicus he called Mount Etna after the volcano.

The most lasting scheme was that of Joannes Riccioli, an Italian Jesuit who in 1651 published the lunar map based on observations by his pupil, Francesco Grimaldi. Riccioli gave the dark plains romantic names like Sea of Tranquillity, Ocean of Storms and Bay of Rainbows. Like Langrenus he named the craters for famous people, but instead of kings he chose philosophers, astronomers and other scientists. The names were arranged in chronological order from north to south, and he grouped nationalities, interests, schools of thought and the like in the same areas. Greek scientists and philosophers were in one group, Arab astronomers in another.

Riccioli did not admit that Copernicus was right and the Earth orbited the sun

(although some historians think he secretly believed that it did). Thus, the name of Copernicus was, as he put it, "flung into the Ocean of Storms." In this same ocean we find, on a tiny, undistinguished crater, the name Galileo.

On the other hand, the Jesuits gave Ptolemaeus, whose idea of an Earth-centered universe was blessed by the Church, a prominent crater near the center of the visible lunar disk. The name of the Danish astronomer Tycho Brahe, who had rejected the Copernican system, was placed on a very bright crater in the southern hemisphere. Also, Riccioli and Grimaldi named two huge, dark-floored craters after themselves.

Riccioli's scheme has lasted to this day. But, in the centuries between, astronomers using better telescopes produced more and more detailed maps of the moon. Johann Schröter added 70 names, and Wilhelm Beer and Johann Mädler used an additional 140 when they published a map more than three feet across. In the latter half of the 19th century more new maps were drawn that added still more names, and also changed earlier ones. Confusion reigned.

In 1921 many of the professional astronomers of the world formed the International Astronomical Union (IAU), which in turn named a committee to standardize lunar nomenclature. Eleven years later an official map and catalog were published, leaving still unnamed many of the thousands of features visible through large telescopes.

Who really cares? What could matter less than the name assigned to some crater visible only through a telescope? I have learned through firsthand experience that naming the moon brings into play passionate views of normally cool-headed scientists, emotions of an interested public, even international politics.

The Space Age multiplied the problems. Just two years after Sputnik, the Soviet spacecraft Luna 3 photographed the far side of the moon, our first view of that whole hemisphere. Jubilant, the Soviets proposed to use Russian names for all the visible features. The IAU had no rules for naming discoveries made by spacecraft, and now there was a whole new moon to be named.

Dr. El-Baz directs the Center for Earth and Planetary Studies at the National Air and Space Museum.

Clerical scholars adopted a plan of nomenclature 300 years ago that still serves as the framework for today's additions.

Craters were to be named for scientists, and it was not difficult to approve names like Sergei Korolev, a rocket scientist; Dmitri Mendeleev, who gave us the periodic table of the elements; and Konstantin Tsiolkovsky, the physicist who suggested space stations.

The dark plains were to be named for states of mind, but the Soviets wanted to call the largest plain on the far side of the moon the Sea of Moscow. Delegates protested, until a Soviet representative stood up and declared: "Moscow *is* a state of mind." Everyone laughed, but the name was approved.

The United States did something of the same when we began giving names to features revealed by the Lunar Orbiter photographs taken in 1966-68, the most detailed ever obtained up to then. An IAU working group appointed to name far-side features considered recommendations primarily from the United States, along with a few from France, the Soviet Union and other countries. One Russian proposal was flatly rejected when doubts

Illustrations by W. B. Park

t the Caroni Bird Sanctuary in Trinidad, you can watch the wings f the Scarlet Ibis catch the rays of the setting sun. Scuba diving hrough Tobago's famous Buccoo Reef, you can share the habitat f fish all colors of the rainbow. On an islet of ours, you can see he Bird of Paradise in his glory.

rinidad & Tobago. We're the natural choice for your next vaca- on. And a swift flight on BWIA makes it all so near, with attrac- ve packages available.

ee your travel agent, call any BWIA office, or contact our Tourist oard office in New York, Miami or Toronto. And mail this oupon today.

Trinidad & Tobago *Just the two of us.*

Trinidad & Tobago Tourist Board
Suite 712-14, 400 Madison Avenue
New York, NY 10017

Please send me a brochure and information on vacations in Trinidad & Tobago.

Name_____

Address_____

City_____

State_____ Zip_____

BWIA International

German astronomers played a major role in lunar map making, and some of their names now grace craters.

were raised as to whether the feature existed at all. At issue was a broad, bright zone on the far side; the Russians wanted to call it the Soviet Mountains. But mountain ranges on the moon are the rims of huge basins which encircle the dark plains or maria, and no such basin appeared on Orbiter photographs of the area.

Furthermore, the Apollo 8 astronauts returned from their flight around the moon with photographs that indicated that the bright zone must have resulted from the confluence of rays, bright streaks on the lunar surface, radiating from two craters.

The Russians were right, however. In the detailed photographs from Apollo 16 I saw the subdued remnants of an old basin, about which I published a paper in *Science* in 1973. The eastern rim of that basin was close enough to what was labeled the Soviet Mountains. Later that year I visited Moscow with a group of scientists as part of the preparations for the Apollo-Soyuz mission. Our talks about cooperation in lunar mapping were not entirely successful, but I did meet Yuri Lipsky, the leading lunar scientist in the Soviet Union. He told me he was the one who had interpreted the bright zone as a mountain range, and that he had been delighted with my *Science* article. Lipsky died recently, and the IAU placed his name on a far-side crater, not far from the mountains he named.

With the Apollo missions, the United States really took over the naming of the moon.

The astronauts, and we scientists and engineers in the program, had to name certain features for easy reference. No one was concerned about the official status of these names. We felt they were needed for operational reasons and did not require formal IAU approval. In reality, there was no way to gain approval: only a few months—sometimes only weeks—passed between assignment of names and the printing of maps for training and the missions themselves.

BIRDHOUSE FOR SALE. $194,000.

Unfortunately, the birds can't buy it.

But we can do it for them.

We're The Nature Conservancy—a non-profit, membership organization that's committed to saving America's ecologically important areas. And unlike other groups, we are able to take immediate action to safeguard the homes of endangered species.

We do it three ways:

We identify land that needs protection.

We acquire land that's important to the balance of nature. (Since 1950, we've saved more than 1,000,000 acres of swamps, marshes, beaches, forests, and prairies from destruction.)

And we look after the land we've acquired, so that it can continue to support the plant and animal life that's dependent upon it.

But we can't do it alone. We need the support of concerned individuals like yourself.

Won't you help by becoming a member? Just send in the coupon below and help save the land.

Do it today. Because the birds can't do it by themselves.

THE NATURE CONSERVANCY

I want to become a member.

☐ $10 single membership ☐ $15 family membership ☐ $1000 lifetime membership

Name _____

Address _____

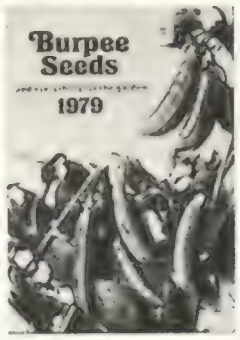
City _____ State _____ Zip _____

Mail to: The Nature Conservancy
1800 North Kent Street
Arlington, Virginia 22209

S1

BURPEE SEEDS GROW Burpee's BURPEE SEEDS GROW

new 1979 Seed Catalog-FREE



Featuring new exciting vegetable and flower varieties for the home gardener.

The new 184-page Burpee Catalog is a comprehensive planting and growing guide with over 1800 vegetables, flowers, fruits, shrubs and trees. Plus helpful hints from Burpee's horticulture experts on how to have a more productive garden. Send for your free copy today.

If you ordered from Burpee last year, you will automatically receive your free Burpee catalog in 1979.

© Burpee Seed Co. 1979

BURPEE SEED CO.
2189 Burpee Bldg., Warminster, Pa. 18974;
or Clinton, IA 52732; or Riverside, CA 92502
(Please mail to nearest address)

Yes. Please send me the 1979 Burpee Seed Catalog FREE.

Name _____
(Please print)
Address _____
City _____
State _____ Zip _____

antique wooden bobbins

from England's Yorkshire textile mills—today's rage in decor!

$3.98 each

Collectors are paying twice as much for these 19th century hardwood originals! We cornered a mill-full, dusted them off a bit for you to treasure as is or refinish. 9" long, one end a metal spool, the other inlaid—most with a maker's name. Included with each, historical data, plus metal cup for your candle—or they can hold dried flowers or branches. Snap 'em up—when they're gone, they're gone forever!
4896 Antique Bobbin . . . . . Each $3.98

Add $1 post. & hdlg. NY res. add taxes. Master Charge or Visa on orders of $10 or more: send account number, exp. date, Interbank number for Master Charge.

LILLIAN VERNON Dept. T12
510 S. Fulton Ave., Mt. Vernon, NY 10550

When a Soviet spacecraft returned the first pictures of the moon's far side, the Russians naturally started naming the most visible features for Russians.

The IAU met only once every three years.

Names used only for features tracked from above to check spacecraft orbits were not much of a problem. Jargon, like F1 and J5, was used, as were names of astronauts' wives and family members. But the names assigned to features at the landing sites quickly became entrenched in the scientific literature. With no hesitation whatsoever, scientists referred to these names as if they were as good as the ones given by Riccioli. Some argued, "And why not? Riccioli didn't even go to the moon."

The first landing, Apollo 11, did not entail much exploration of the lunar surface, and thus there was little need for naming craters. One was dubbed West as the astronauts landed on the western edge of their target landing area.

At the Apollo 12 site the astronauts named a distinctively arranged cluster of craters Snowman; the crater on top was called Head. A crater with a terrace became Bench; another with a bright rim became Halo.

In training the Apollo 13 astronauts, I described the most prominent crater in their landing site as cone-shaped and it became Cone. Rows of craters were named Doublet and Triplet, and an unusually shaped crater cluster was christened Weird. The names persisted when Apollo 13 failed in flight and Apollo 14 was reassigned to the same site.

As more complex target areas were chosen and exploration plans became more elaborate for later missions, the need for names became more pressing

The BUSHMAN by AKUBRA®
The Bushman is the outdoorsman's hat from Australia—the true bush hat. Made in Akubra's finest Imperial Quality pure fur felt, fully lined, 3¼ inch brim. Shown with the unusual ridge-braid leather band. Color Nullarbor Tan.

Bushman, Ribbon Band 37.50
For ridge-braid band add 9.50
Please add $1.50 for shipping
State size 6¾ through 7⅛
Send for our unique catalog Satisfaction Guaranteed
Visit our Seattle store at 1523 N.W. Ballard Way

David Morgan
Box 70190, Seattle, WA 98107
(206) 282-3300

Preston's New 112 page Fully Illustrated Catalog of

Ship Models and Decorative Nautical Ideas for the Home.

You could shop for months and never find the hundreds of decorative nautical ideas illustrated in Preston's new catalog: 112 pages teeming with ship models, marine paintings, nautical lamps and clocks, ships' wheels, figureheads and scores of other nautical ideas for the Home.

Send 25¢ for catalog to:
PRESTON'S
67-P Main St. Wharf, Greenport, N. Y. 11944

West End Shop
P.O. Box 3216, 632 S. Peters St.
New Orleans, La. 70177, (504) 945-6650.

Mahogany Serving Bar & Cart.
An elegant and very practical serving accessory. Hand-finished solid mahogany. Bronzed casters available. Lift-off tray 30"x18", 30" high. $44. Casters $3 additional (please add $6 for shipping). Satisfaction guaranteed. Send check or charge VISA or MC (include exp. date, please) or call us for prompt service.

Would you trust your best photograph to the corner drugstore?

We hope not! Not any more. Especially if you're a serious photographer interested in quality.

Accent35 was created to give you the best film processing, color prints and enlargements available anywhere.

You see, we're a new division of Meisel Photochrome Corporation, the country's largest custom color lab for professional photographers. We've spent 20 years building a reputation for the best quality and service.

Of course, Accent35 is a chip off the old block!

So, if you're looking for something better, send us your 35mm color negative film for processing and prints or your best 35mm negatives and slides for color enlargements. (No 110 or 126 film, please.)

We make economical machine prints, also superb custom prints that are enlarger-made, cropped, dodged and burned-in.

As an introductory offer, we're giving you a special price on 8x10 custom enlargements from your 35mm color negatives and slides. They're only $4.95 each until March 31, 1979.

So try us. Use the coupon or a letter to order, then see if you don't like us better than the corner drugstore!

Photography by Ozzie Sweet ©1979 Meisel

Quality Processing & Color Prints!

Process & 3½x5 prints: _____ 35mm rolls enclosed
☐ 20 or 24 exposures @ $4.75 _____
☐ 36 exposures @ $6.75 _____

Color enlargements: _____ originals enclosed
Custom 8x10 @ $4.95 _____ 11x14 @ $7.50 _____
Machine 8x10 @ $2.00 _____ 11x14 @ $5.10 _____
Add 10% for postage and handling, also add sales tax for TX, WA, KS and GA.
☐ Check or MO enclosed. Total $ _____
☐ Credit Card No. _____ Expires _____
☐ Visa ☐ Master Charge
Signature _____
☐ Please send me information on other services.
Name _____
Address _____
City _____ St. _____ Zip _____

Offer expires March 31,1979. Frame not included.

Send to: Accent35, P.O. Box 220014A, Dallas, TX 75222

Accent35™
A division of Meisel Photochrome Corporation

We use Kodak paper... for a good look.

and the variety increased. Some craters in the Apollo 15 landing site were given names that described their morphologies, such as Dune and Crescent. But one was named Earthlight, after an Arthur Clarke science-fiction novel. Another was called St. George, named after the wine that Jules Verne's crew drank before their voyage to the moon.

One crater at the Apollo 15 site was called O.S. It was across a 1,200-foot-deep rill from where the astronauts were to land. They named the crater O.S. because if they landed near it they would have to say, "Oh, shucks, we missed."

At the Apollo 16 site a small crater became Baby; a group of five was called Cinco; a hazardous area was named Spook; and a crater that appeared ruined by younger events became Wreck.

The site of the final mission, Apollo 17, was the most extensively explored and needed the most names. This crew included a geologist, Harrison (Jack) Schmitt, now a U.S. Senator from New Mexico, who wanted to be sure that scientists were commemorated along with other favorites of the astronauts. So in addition to Shakespeare, Cochise and Captain Nemo, craters were named for famous geologists and explorers.

Some of the names already had been given to other craters elsewhere on the moon, thus presenting the IAU with an intolerable conflict. The IAU also had to deal with a crater named for Lara, the heroine of Boris Pasternak's *Dr. Zhivago*, a choice not popular with the Russians, and two named for Robert E. Lee and Abraham Lincoln despite an explicit prohibition against "political, military and religious figures."

IAU approval was needed. The names were already being used in the scientific literature while at the same time the National Aeronautics and Space Administration would not use the names on its maps until they had official approval. The job of obtaining IAU approval of these "Apollo names" was given to me. I discussed the matter with the concerned scientists and astronauts, weeded out the list of names to choose important ones, and negotiated the matter with IAU officials. After a year of steady correspondence, I was invited to present the case at the 1973 meeting in Sydney, Australia.

The popular feeling of the IAU membership was that because the names were needed for "operational" reasons, they should remain informal. After my day in court and some reasonable compromises on both sides, I returned from Sydney with the good news: most of the astronaut-given names were now legitimate.

Another decision at Sydney permitted the names of people other than scientists to be used on the moon. Those who sought the change argued that once the names of great scientists were used up, the IAU would have to go to the bottom of the barrel for new names. So why not honor historians, architects, composers, dancers, painters and everyone else who had contributed to human culture?

The Soviet delegation objected vehemently. I found out it was a matter of bureaucracy. As long as names of Soviet scientists were being nominated, the USSR Academy of Sciences would be in charge. But if the door were opened to other professions, other agencies would step in and the Academy of Sciences would lose control, I was told.

The IAU was not to be left alone to wrestle with the lunar naming process. The United Nations, through its Conferences on the Standardization of Geographical Names, argued that the U.N. should contribute to selection of nomenclature for international use, aided by its internationally accepted phonetic alphabet for use in transliterating names from various languages.

The U.S. Board on Geographic Names pointed out that it was charged by law to "formulate principles, policies and procedures to be followed with reference to both domestic and foreign geographic names," and went on to define the moon and planets as foreign.

NASA named scientists to its Lunar and Planetary Photography and Cartography Committee, which appointed a lunar nomenclature subgroup.

At the same time, the problem was compounded many times over when spacecraft started revealing surface features on Mercury, Venus and Mars and its moons. In the excitement of discovery the nomenclature process again began haphazardly. Copernicus and Schiaparelli, among many others, had their names on both the moon and Mars. The American astronomer Gerard Kuiper was commemorated on the moon, Mars and Mercury. Something had to be done—and fast.

The IAU created a working group on Planetary System Nomenclature, chaired by the distinguished Canadian astronomer Peter Millman, which in turn appointed subgroups for the moon, Mercury, Venus, Mars and the outer solar system. They came up with a plan under which features in the outer solar system

American astronauts did not let convention stop them from naming craters after Cochise, the Apache; Lara, the heroine in *Dr. Zhivago* (a choice not popular with Russians); and Shakespeare. Another was called Spook.

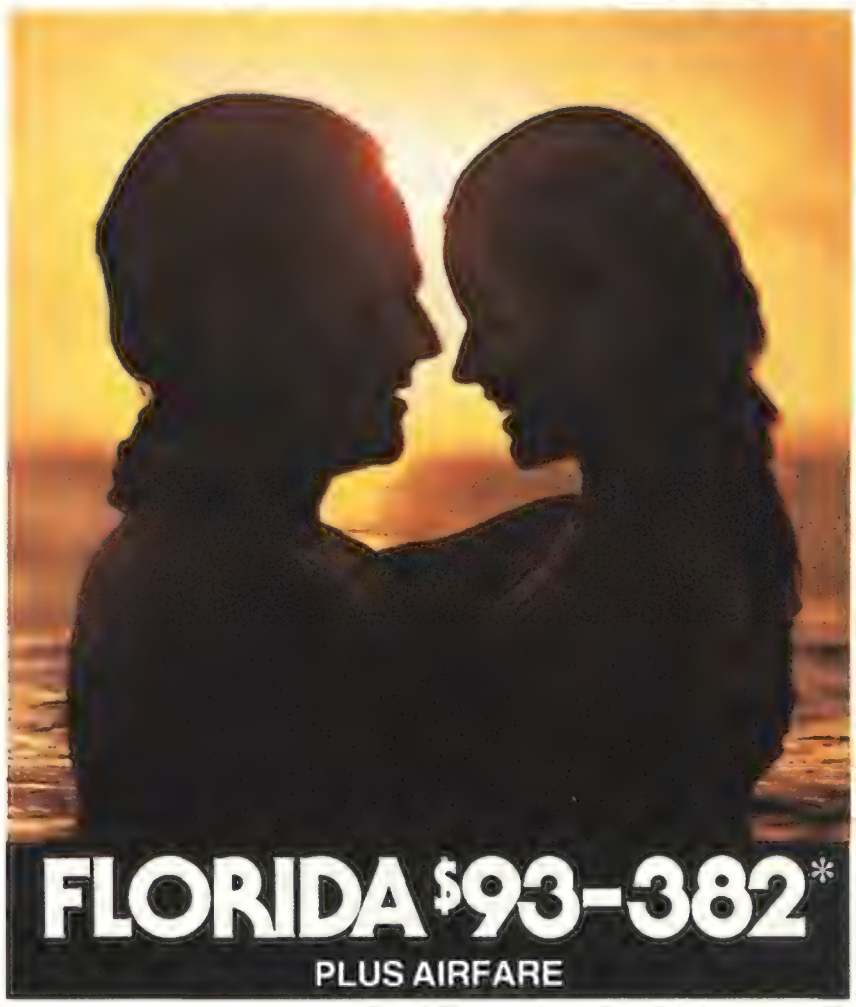
EASTERN HAS A WARM SPOT JUST FOR YOU.

Come to a place where snow shovels don't exist. Where slush is just a word. And ice is something that refreshes a drink.

Come to Eastern's Florida. We can take you to more of it, with more sunny, budget-minded vacations, and more flights with discount fares than anyone.

1. SOUTH FLORIDA FUN CHOICE. $117-$326* PLUS AIRFARE. Sample the fun for 8 days/7 nights at selected hotels throughout South Florida. Relax in places like Miami, Ft. Lauderdale, Key Biscayne, West Palm Beach, or the Florida Keys. Includes airport transfers (except to Florida Keys). Prices will vary by destination. (Ask for IT8EA1SFUNW.)

2. SUNSHINE SPORTS. $298-$382* PLUS AIRFARE. Keep your form in form with tennis or golf for 8 days/7 nights at selected hotels in South Florida. Choose from places like Ft. Lauderdale, West Palm Beach, and Miami. And explore it all with a subcompact car† that's included for seven 24-hour periods. (IT8EA1SFUNW)



3. WALT DISNEY WORLD VACATION KINGDOM. $93-$246* PLUS AIRFARE. Here's our bargain way to the Magic Kingdom. Stay 8 days/7 nights at a selected Orlando hotel. You'll get Eastern's exclusive Walt Disney World Ticket Book, good for one day's admission and 9 attractions. Round-trip airport transfers included. (IT8EA10FUNW)

THE AMERICAN EXPRESS® CARD. Don't leave home without it.℠ It lets you charge any of these vacations and get extended payments with the "Sign & Travel"® plan. Pick up an application wherever the card is welcomed.

For more information call your travel agent. Or Eastern Airlines.

*Prices are per person, double occupancy, and do not include airfare, meals or local taxes. Prices are subject to change, vary depending on destination selected and expire 4/15/79. †Gas, insurance and applicable drop-off charges are not included in car rental.

EASTERN

WE HAVE TO EARN OUR WINGS EVERY DAY

There's Nothing Like It!

Wonderful Sight Light

No Glare . . . No Squint . . .

Contemporary Model

Traditional Model

Specially designed optical system uses standard bulb

Up to 5 times the light of conventional lamps . . . yet completely glareless!

A PERSONAL CHAIRSIDE READING LAMP

* READING SMALLEST PRINT
* SEWING BLACK ON BLACK
* FULLY ADJUSTABLE

Avocado, White or Black with Upright/Arm in Solid Satin Brass:
Traditional $94.50
Contemporary $81.50
Overall Satin Brass:
Traditional $108.50
Contemporary $94.50

BUY AMERICA'S FAVORITE READING LAMP!

Shpmt. ppd. in Cont. USA • Check or MO
Credit Cards Accepted: VISA, MC, AX

LC LIGHT-CRAFTERS
Dept. N1
36 Sherwood Place
Greenwich, Conn. 06830

QTY. | ITEM | COLOR

Name
Address
City State Zip
Credit Card # Exp.
"10 years selling discriminating customers!"

WIDE OPEN SPACE...

Great Getaway Place!

Up in the saddle or down around the cookout campfire, spirits soar at this exclusive ranch resort. Move on to tennis, skeet or nearby golf. Break for bountiful buffets and dinners. Take room to roam far away from the city hustle . . . twenty-thousand acres only 60 minutes from Phoenix where friendships sparkle in the clear Arizona air. Private airstrip. For reservations and information contact:

RANCHO de los CABALLEROS

Wickenburg, AZ 85358 - (602) 684-5484
Dallas C. Gant, Jr. - Manager

will receive names from ancient mythology. Mars will keep most of its traditional names but its small craters will be named after villages on Earth. On Venus female names will be used, as will names of radio and radar scientists and engineers. Mercury will be reserved for nonscientists, and the moon will remain the place for commemorating great scientists.

Of the scientists immortalized on the moon, the Smithsonian Institution has its share: James Smithson, Samuel Langley, Charles Greeley Abbot, Leonard Carmichael, Donald Menzel and Michael Collins. All of these but the last are no longer alive.

Collins, very much alive, is Under Secretary of the Institution.

Why is his name there? After the landing of Apollo 11, the American delegation to the IAU submitted a list of astronauts to be commemorated. It included the three men who died in the Apollo fire and six living astronauts: the three men who made the first circumlunar flight on Apollo 8 and the astronauts of Apollo 11. To use the names of living people was a painful break from tradition, but the accomplishments of the astronauts could not be ignored. Finally, the Soviet delegation added its support to the proposals—and six names to the list. Thus craters were named for six living American astronauts and six Soviet cosmonauts.

Commemoration is not, of course, the primary purpose of naming lunar features. It is done so investigators can be sure they are referring to the same feature. So there are times when even small features on detailed maps must be named. Following a plan adopted in Sydney, these features are given first names taken from an international list of female and male names. They do not refer to specific people.

Recommendations for naming lunar features are now channeled through two groups. The IAU accepts names from the international community. Those from the American public are processed by the U.S. Board on Geographic Names (in order to be included on any official U.S. map, a name must be approved by the board).

Today new names are placed on lunar features only when absolutely necessary. Although most of the moon has been photographed in varying detail, I am certain that more and better photographs will be obtained in the future. I am a firm believer in the inevitability of continued exploration of the worlds around us. The human race will continue to strive for more knowledge and better living. One day the moon may be a base for exploring the universe, or a source of raw materials for space industrialization. When that day arrives, better maps will be required. Thus I am certain that future generations will have the freedom to make their own mistakes as they have their round of naming the moon.

Perhaps the boldest suggestion of modern lunar nomenclature was to rename the moon itself for Artemis, the moon goddess.

Try to look at this eye without moving yours.

The fact is, you can't do it.

Even in a fixed stare, your eyes are constantly on the move, darting back and forth in two dimensions. Activated by discrete nerve impulses, this micro-motion would make you feel seasick but for the role of perception in smoothing out the tiny, quick jumps.

Now you can explore this fascinating quantum world within the eye in the January issue of SCIENTIFIC AMERICAN.

You'll also discover how photons do the work of electrons in new communications technologies. Fiber optics will serve as "conductors" with their own peculiar electro-magnetic behavior. (Do you know why glass is transparent?)

Just as glass fiber is more than a "light pipe," so a cell membrane is more than a container. This month's issue delves into the working functions of this membrane by examining its structure in detail.

From other articles, you'll learn what lets the sperm whale dive longer and deeper than any other air-breathing animal. And why the continental drift theory holds true despite the recent discovery of continental "roots" penetrating far into the earth's mantle. Even how a piano manages to sound in tune when its individual strings are tuned out of tune.

This is the kind of wide-ranging diversity our regular readers enjoy every month. SCIENTIFIC AMERICAN keeps people abreast of the major advances in science that have made the past three decades the most momentous in intellectual history.

These important developments have been reported in our pages by the scientists (including 65 Nobel prize-winners) who actually did the work. The collaboration of our editors in the preparation of text and illustration makes this work accessible to a world-wide readership.

So join our more than 675,000 regular readers by using the coupon. As soon as your subscription payment is received we'll send you a free bonus book: Cosmology + 1 (124 pages, regular price $5.50), an anthology that explores radio galaxies, black holes and other splendors of the cosmos.

There's no need to send payment with your order. We'll bill you later. But subscribe now, so you can keep a close watch on the scientific advances that are changing the world before your very eyes.

SCIENTIFIC AMERICAN

SUBSCRIPTION RESERVATION
SCIENTIFIC AMERICAN
415 Madison Ave., Dept. WT
New York, N.Y. 10017

Please enter my subscription to the monthly issues of SCIENTIFIC AMERICAN for the term I have checked. I understand that you will also send me—absolutely free—the 124-page book Cosmology + 1 (regular price: $5.50), as soon as my payment is received.

YOUR GUARANTEE
You may cancel your subscription to SCIENTIFIC AMERICAN at any time and receive a refund for the balance of your subscription. The bonus book is yours to keep.

Name

Address

City/State/Zip

☐ 1 year—$18 ☐ 2 years—$33 (save $3) ☐ 3 years—$45 (save $9)

☐ My payment is enclosed ☐ Bill me

(Subscription rates outside U.S. and Canada:)
(1 year—$22 2 years—$40 3 years—$55)

WT

These beautiful creations by sculptor and conservationist Wally Shoop are the first two bronzes in an eight piece collection depicting nearly extinct species. Truly remarkable pieces, they are sculpted in high relief. The eagle's body rises from the plate, with the tip of its outer wing extending more than four inches from the surface. The wild mustangs, three abreast, gallop with abandon from their oval backdrop. Each bronze is twelve inches long, eight inches wide and weighs five and one-half pounds. The back of each piece will bear the artist's signature and internationally registered mint mark, along with a personal statement. Also located on the reverse side is a hanger which is a part of the casting and the hand engraved edition number identifying each piece as one of only 2,500.

Shoop is an expert in the ancient lost wax process of hot bronze casting, having built his own foundry on his farmstead north of Stillwater, Minnesota. He will supervise each step in the complicated process to be sure that there will be no compromise in quality standards.

At the age of 37, Shoop has just completed a term as president of the Minnesota Sculpture Society, an organization which includes artists from seven midwestern states. He is one of the country's most active wildlife conservationists, forwarding his message primarily through his art. He has drawn particular attention to the plight of the timber wolf through his donation of two life-size bronze wolves to the new Minnesota Zoölogical Garden. These bronzes have been officially designated as a Minnesota State Monument, and may soon be designated as a National Monument.

The artist's concern for wildlife is more than rhetoric, for he has pledged ten percent of his proceeds from this project to the Audubon Society. The Audubon Society will use the funds for preservation of wilderness areas, and, when possible, direct attention to the specific subjects featured on the bronzes.

This series offers the collector the unique opportunity to own an exciting work of art, and at the same time help preserve our precious wild creatures. The issue price per piece is $325.00, and includes the cost of shipping and insurance.

For immediate shipment or further information write Commemorative Imports, Box D, Bayport, MN 55003, or call toll-free 1-800-328-1678. Minnesota residents may call collect (612) 439-4918.

Copyright © 1978
Studio Sinoauv

By Jane Stein

The bioethicists: facing matters of life and death

At the Hastings Center, scientist and scholar wrestle moral problems arising from new medical technology

Daniel Callahan (left) and Willard Gaylin, who founded Hastings Center in 1969, are now key figures in the expanding field of bioethical inquiry.

When history's first test-tube baby entered the world last year, the event was heralded as the most anticipated birth in 2,000 years. If that statement is inflated, there is no doubt that the occasion generated enormous public interest. While much of that interest was the result of simple titillation, there was also an undercurrent of serious concern—expressed by scientists, theologians, politicians and ordinary folk—about the ethical implications of creating life outside the body.

Test-tube fertilization is just one of many recent scientific advances that may create, extend or control life. Recombinant DNA, cloning, treatment of genetic disease in utero, implanted artificial hearts, anti-aging drugs—each of these is plausible and some are already possible. A Pandora's box of medical technology has sprung open, and along with the good that may emerge from it comes a host of questions about our traditional values concerning birth, life and death. In the last few years Man's attempt to wrestle with these questions has produced a new field of philosophical inquiry, usually known as "bioethics." It is a discipline that involves making decisions about—literally—matters of life and death.

Perhaps the most influential locus of bioethical study is a "think tank" called the Institute of Society, Ethics and the Life Sciences, and known informally as the Hastings Center, at Hastings-on-Hudson, New York. There, in a mansion that once belonged to Flo Ziegfeld and Billie Burke, philosophers, lawyers and doctors are investigating burning issues in key biomedical areas: death and dying, genetics, behavior control and population. Their purpose is to assess the moral problems associated with these issues and, when possible, to make recommendations about how governments, physicians and citizens can come to grips with them.

The Hastings Center does not fit a visitor's preconceptions of what a philosophical institution should be like. The atmosphere is informal, dress is casual. There is no hushed silence or Gothic gloom. The feeling that pervades the center is one of urgency, excitement and action—a tone set by its founders.

The center originated in the late 1960s, when Daniel Callahan (above), a philosopher with seemingly endless intellectual and physical drive, was writing a book on abortion. "My interest," recalls Callahan, the former executive editor of the liberal Catholic journal *Commonweal,* "was not to argue a case for or against abortion, but rather to investigate how the public makes a decision." In order to do this, he steeped himself in medical, legal, biological, philosophical and theological aspects. Tackling an ethics problem from an interdisciplinary approach made so much sense that Callahan had the idea of establishing a network of people from various professional backgrounds to work on

Jane Stein, a free-lancer who covers medicine and science, recently wrote the book Making Medical Choices.

ARCHAEOLOGY

The Magazine for Past Lovers

Admit it – you've always been secretly fascinated by the mysteries of antiquity ... always wondered what life was really like in ancient Egypt, China, Greece, Mexico, Peru. Find out in ARCHAEOLOGY Magazine! Six times a year its authoritative clearly-written articles and stunning color photographs bring the ancient world alive. Meet the peoples of the past. Marvel at their achievements, and admire the beauty they left behind. There's nothing else like ARCHAEOLOGY. Try it now.

ARCHAEOLOGY Magazine, Dept. 8101
P.O. Box 385, Martinsville, N.J. 08836
Please send ARCHAEOLOGY to:

Name _____

Address _____

City _____ State _____ Zip _____
☐ One year $15 ☐ Payment enclosed
☐ Two years $27 ☐ Bill me
Add $2 per year outside U.S.A.

Send gift card signed _____

At last–
a beautiful way to keep warm.

The WESO Ceramic Tile Stove is the newest descendant of the mighty Kachelofens — those splendid tile and masonry heaters that have warmed European homes for over 700 years.

Its airtight cast iron core is surrounded by hand-glazed ceramic tile, and will heat your home by both natural convection *and* radiant warmth. The WESO burns wood, coal, the new coal logs or bricks and warms evenly, floor to ceiling, without need of a blower.

Set the thermostat; the WESO will burn 12 hours without reloading. Visible flames flicker behind tempered glass and a wrought-iron grille. Yet the tiles are safe to the touch!

The highly-efficient WESO is safe, clean and definitely for you if your taste rules out woodstoves styled in 18th-century baroque or sheet-metal modern. Choose from 5 beautiful tile colors and designs.

Please send $1 for our detailed color literature.

Ceramic Radiant Heat

Dept. SM-1, Lochmere, N. H. 03252 (603) 524-9663

Eric Cassell, a Hastings fellow and professor of medicine at Cornell

BIG WINTER SAVINGS NOW

smart boating without high cost or constant expense. No need for 'big rig' burdens. Go when and where you please, efficiently and carefree with your compact and fabulous

FOLBOT for YOUR Sport and Family Recreation.

fits in every home or car

America's foremost small Craft in many styles and sizes from 1 to 4 seaters, provide smoother, faster ride with 1 to 10 HP motors. Yacht-smart sails or lightweight paddles; available either FOLDING or rigid PORTABLE in prefabricated Kits or Factory Finished in all colors and brilliant Deluxe, or subdued camouflage.

NEW
Smart
speedline
Kayaks
JUNIOR
Prefab $117.
JIFFY $152.

CAYAT
16 feet long
Basic Kit
from **$49**

YACHT-SMART SAILING
Large Dacron Sailrig, $185

In 4 Winter evenings or 2 Rainy days, complete the **Fabulous Glider** from Easy Prefab at $168. NOW!

ACTION color CATALOG
FACTS & FIGURES **FREE**
Mail coupon or address to:
Folbot Corp., S179 Charleston, S. C. 29405

NAME _____

ADDRESS _____

CITY _____

STATE ZIP

issues growing out of the biomedical revolution.

Callahan's first recruit was a neighbor in Hastings-on-Hudson, Willard Gaylin (p. 107), a practicing psychoanalyst, teacher of medical and law students and seminarians, as well as a prolific author. "When I first discussed my interest in ethics with my colleagues when I attended Columbia medical school," Gaylin recalls, "they looked at me as if I had undergone a religious conversion." Bringing the study of ethics to medical students —or, actually, back to medical students— seemed foreign to them.

But the time was growing ripe, and the fledgling Hastings Center began its work in 1969. Callahan became the director, with a physical plant consisting of a filing cabinet kept in a spare bedroom in his house. As president, Gaylin cranked out letters seeking support on a mimeograph machine kept in the attic.

Callahan and Gaylin made up a list of people to contact, drawn from their own experiences in medicine, law, philosophy

University, leads a seminar about the "subjective elements in suffering."

and political science, and invited them to come to Hastings to discuss the idea of an interdisciplinary bioethics center. "Thirty academics came and even paid their own way—rare in academic circles," Gaylin relates as a way of explaining the immediate and positive acceptance of the idea. In the ten years since then, the center has acquired a professional staff of 24, with 90 elected fellows, 10,000 associate members, a million-dollar annual budget, and offices in the Spanish-style house on Ziegfeld's 22-acre estate.

Will Gaylin, a flamboyantly verbal man, talks nonstop about the explosion of interest in medical ethics issues. "Technology has forced an awareness that almost inevitably, in every major medical decision, there is—covertly or overtly—a medical moral decision." In rapid succession Gaylin mentions the totally implanted artificial heart, behavior control, a natural time to die. Each topic raises important ethical issues.

Dan Callahan, although more low-key than Gaylin, is also on a nonstop tread-

Maupintour's Egypt-The Nile

Middle East

High quality escorted tours. In-depth sightseeing, the right hotels, most meals, entertainments, limited size. We help you enjoy your holiday.

EGYPT/THE NILE
Be sure, secure in Egypt. Maupintour includes everything! We offer 9, 15 and 17 day tours to Egypt exclusively. Some feature a 4 day Nile cruise. Weekly departures year 'round.

THE NILE CRUISE
One of the world's great travel adventures! 17 day tour, including a 12 day cruise along the Nile between Aswan and Cairo. Abu Simbel, too!

THE MIDDLE EAST
Comprehensive coverage of Egypt, Syria, Jordan, Israel. Recommended to those who want in-depth touring to the Middle East. 22 days.

GREECE AND EGYPT
Glories of the ancient Greeks and mysteries of the Pharaohs, combined with a 4 day Aegean Sea cruise to Mykonos, Ephesus, Patmos, Rhodes, Crete and Santorini. 15 days.

THE SUDAN AND EGYPT
See the exotic Sudan's Khartoum and Omdurman made legendary a century ago by General Gordon, Lord Kitchener, and the fanatic Mahdi plus dancing Dervish, camel markets, Nile sail, Cairo, the Pyramids, Sphinx, Memphis, Luxor, Aswan, Abu Simbel, Geneva.

ANCIENT CIVILIZATIONS
See renowned treasures of three great civilizations. Three days each in Cairo and Athens, the Oracle of Apollo at Delphi, three day Aegean cruise, four finale days in glorious Rome.

PERSIAN TREASURES
Begin in London, then see Teheran, Isfahan, Persepolis and Shiraz. The best of ancient Persia and modern-day Iran in 15 days.

TURKISH TREASURES
Adventure in a fabled land! From Istanbul, crossroads of the world, travel to Troy, Pergamum, Ephesus, Nevsehir and modern-day Ankara. Fairy chimneys, underground cities! 17 days.

CRUISE-TOURS/EGYPT
A fine selection of tours incorporating superb cruises. Enjoy ports of call throughout the Eastern Mediterranean plus: Greece *(Royal Viking Star)*; Paris/Rome (Karageorgis' *Navarino)*; Italy (Norwegian America's *Vistafjord*); and Trans-Atlantic (Norwegian America's *Sagafjord*). 19 to 45 days.

Ask your Travel Agent for brochures or send this coupon to Maupintour:

Maupintour *quality touring since 1951*

Maupintour, 900 Massachusetts Street
Lawrence, Ks. 66044. 800/255-4266.

name

address

city

state/zip

my travel agent *ssn-mid*

Ask about these Maupintour escorted holidays:
☐ Alps ☐ E. Africa ☐ Iran ☐ Asia ☐ California
☐ Alaska ☐ Balkans ☐ British Isles ☐ Canada
☐ Black Sea ☐ Turkey ☐ England ☐ Orient
☐ Colorado ☐ Egypt/The Nile ☐ Italy/Sicily
☐ Europe ☐ France ☐ Germany ☐ Guatemala
☐ Greece/Aegean Isles ☐ S. Pacific ☐ Hawaii
☐ Galapagos ☐ Ireland ☐ USSR/East. Europe
☐ Mediterranean cruise ☐ Mexico ☐ Morocco
☐ Middle East ☐ North Cape ☐ South America
☐ USA Rail Tours ☐ India ☐ Spain/Portugal
☐ Red Sea ☐ Scandinavia ☐ Central America

Royal Viking and Norwegian America ships are Norwegian registry; 'K' Line and Karageorgis ships are Greek registry.

THE PRINCETON COMPANY

CHIP CARVING KNIVES

These wonderful German relief carving and whittling tools make you an instant success at this relaxing and satisfying hobby. Tempered steel, mirror-polished blades are pinned to lacquered Beechwood handles. Overall length: 6". In fact, these knives are indispensable for all craft work! Five-piece Chip Carving Set, $17.95 plus $1.50 handling and postage.

OK PRINCETON, here's $17.95 plus $1.50 (H&P) for the knives. Include your 1979 catalog FREE!

Name _____

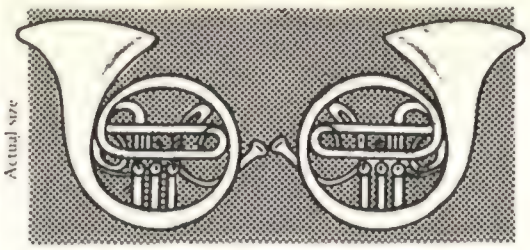
Street _____

City _____ State _____ Zip _____

☐ 1979 Catalog of Quality Hand Tools, $1.00. SMITH. 1/79

PRINCETON CO., BOX 276ZZ,
PRINCETON, MA. 01541

French Horn Jewelry



Actual size

Exquisite gold vermeil miniatures from our *PERFORMING ARTS GIFT COLLECTION©*

Earrings/Cufflinks $40.00
Stickpin/Tie tac 22.50

(Gift boxed. History incl. Add $2.00 pstg. NYC: 8% tax)

LINCOLN CENTER GIFT SHOP
Dept-SM 140 West 65th Street New York, New York 10023

FAMILY CREST RINGS

Solid 14K Gold, **$210.** Sterling Silver, **$95.** **WE WORK IN THREE BASIC WAYS**—If you have a crest, send a copy of it, otherwise you may check it against our list, or you may design your own (see below). **SEND FOR OUR FREE COLOR CATALOGUE.** If, in addition to free catalogue, you want our booklet with over 20,000 names for which we have crests available plus instructions on how to design your own crest, **send us $1.00.**

HERALDICA IMPORTS, INC. D•SM
21 WEST 46th ST. • NEW YORK, N.Y. 10036

Wafer-Thin Elegance

You've come a long way, and so have calculators. You've seen thick ones and thin ones, red ones and green ones. The latest and best ones have the new LCD display, which shows the numerals in large black digits—visible even in bright sunlight.

The National Semiconductor is our personal choice as the one you'd most like to own. It consumes so little power that its 2 batteries last up to 5 years—even if you never turn it off! As thin as 2 quarters, it's the ideal traveler and constant companion. Sized to the dimensions of a credit card, it fits neatly in your shirt pocket or billfold. And you'll appreciate enough space between the keys for easy operation. The brushed bronze-tone case is complemented by orange and brown accents and a stitched brown leather-like case. Functions include 8-digit display, full memory with separate register, percent key with add-on and discount, square root, chain calculations, and automatic constant.

Comes with 90-day manufacturer's warranty and our 2-week return privilege. You must be delighted or return it for a full refund.

ORDER TOLL-FREE

Credit card holders may use the toll-free ordering number below. Or send check for $29.95 plus $1.50 delivery (add $1.80 tax in California).

Ask for Op. 25S
(800) 824-7888
In California,
(800) 852-7777.
Alaska & Hawaii
(800) 824-7919.

THE SHARPER IMAGE
260 California St.,
San Francisco, CA 94111

A Hastings scholar meditates while strolling on broad lawns surrounding

mill, writing 100 letters a week, three articles a month for journals and introductions to books; giving testimony; attending committee meetings. Callahan counts off some of the philosophical problems: individual good versus societal good, the concepts of justice and natural rights, coercion, autonomy, paternalism. "Is there," he queries, "a natural right to health care?"

The Hastings research does not stop with a philosophical analysis. "When we take up a problem, we start at the theoretical level, but we carry it through to some practical application."

Consider what happened with sickle-cell anemia, Callahan points out as an example (SMITHSONIAN, October 1973). Sickle-cell disease is a disabling and painful disorder in which the normally round red blood cells have a distorted sickle, or crescent, shape when their oxygen supply is low. The sickled cells clog the microcirculation, resulting in tissue death. Anemia, poor appetite and low resistance to infection are common, and pneumonia is a frequent cause of death. The disease hits the black population hard. About eight percent of American

the old Spanish-style mansion that belonged to Ziegfeld and Billie Burke.

blacks have the sickle-cell trait, which means they are carriers of the faulty gene. If carriers marry, there is a 25-percent chance that each of their offspring will have the disease.

In the late 1960s, rapid, inexpensive and accurate tests were developed to detect people with sickle-cell anemia, as well as those with the sickle-cell trait. There was a rush to screen all blacks for sickle cell without taking the time to consider the consequences.

Blacks who were pushing for the screening were victimized by the very laws they sought to have enacted for protection. Rights were flagrantly violated as states passed legislation for mandatory preschool and premarital blood tests. People began to realize that, in the wrong hands, a genetic profile could be dangerously discriminatory. Only those with the disease have a shortened life-span, but blacks who had only the sickle-cell trait lost jobs, and many were charged higher rates for life insurance because employers and insurance companies confused the trait with the disease.

"This is what we call the klutz factor," says Callahan. "When procedures done in

BROTHER TIMOTHY'S NAPA VALLEY NOTEBOOK

How to tell the taste of a white wine by its name.

Each noble white varietal wine grape has a distinct personality and character that it brings to the taste of its wine. In The Christian Brothers Napa Valley cellars, we make our wines in such a way as to bring out the ultimate in these varietal characteristics. Thus, the name of the grape on our Napa Valley bottlings is the key to the taste of our wine.

the Christian Brothers SELECT NAPA VALLEY CHENIN BLANC

Chenin Blanc, the charming grape used in the Loire Valley, has developed even more of its wonderfully fruity quality here in the Napa Valley vineyards. Our bottling is a delicate balance of natural sweetness and dryness. This is a wine to offer with salads and chicken dishes.

the Christian Brothers SELECT NAPA VALLEY PINOT CHARDONNAY

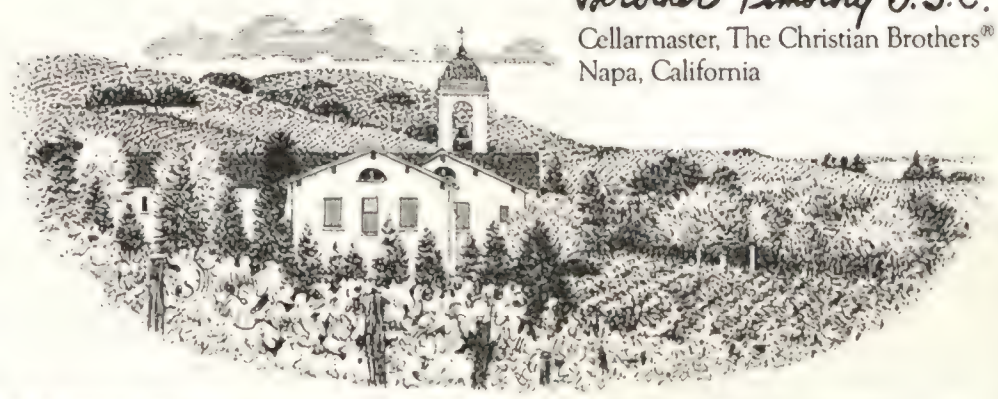
The Christian Brothers **Pinot Chardonnay,** on the other hand, is exquisitely dry and full-bodied. This is a white wine to serve at an important dinner with white meats or fish. It is fully matured and ready to drink when it leaves our cellars, but you may wish to put it down in your own cellar for it continues to improve in the bottle.

the Christian Brothers SELECT NAPA VALLEY JOHANNISBERG RIESLING

A slow, cool fermentation in stainless steel cooperage has made our Napa Valley **Johannisberg Riesling** a very dry wine that is especially good served with ham or veal.

These are just three of our bottlings. As with all our wines, they are allowed to mature at their own leisurely pace, and blended in our own traditional way so that each time you open a bottle, you will enjoy all of the goodness of the grape.

Brother Timothy F.S.C.
Cellarmaster, The Christian Brothers®
Napa, California



WORLDWIDE DISTRIBUTORS: FROMM AND SICHEL, INC., SAN FRANCISCO, CALIFORNIA, U.S.A.

SHEARLING EAR MUFFS

for Men, Women, Youths

Luxuriously soft sheepskin muffs protect ears against chill winds. Hold snugly in place with adjustable headband. One size fits Men, Women, Youths. #2737 Shearling Ear Muffs $5.95 postpaid.

Order Today! Money Back Guarantee!

Enclosed is my check or money order for $ _____
(Add sales tax where applicable.)

Please RUSH my #2737 Shearling Ear Muffs.

Name _____

Address _____

City _____

State _____ Zip _____

☐ Send me FREE your unique color catalog of quality outdoor apparel and equipment.

Eddie Bauer

Dept. VSS, Third & Virginia, Seattle, WA 98124

FREE WOODCRAFT CATALOG

A complete line of ready-to-assemble quality furniture and accessories in a variety of woods—oak, cherry, walnut, birch and pine. Includes grandfather clocks, music boxes, roll-top desks, gun and tool cabinets, decorative wall hangings, planters, even Tiffany lamps. 145 items in all. Build any of them at a fraction of store-bought prices! Easy to assemble. No special skills or tools needed.

Mail Coupon for FREE Color Catalog or call toll-free 1-800-247-5018

Woodcraft Collection NM8
1400 North Fruitridge Ave.
Box 1174–NM8, Terre Haute, IN 47811

Please send me my FREE color Woodcraft Collection catalog.

Print Name _____

Address _____ Apt. _____

City _____

State _____ Zip _____

laboratories or carefully controlled clinical settings get out of the hands of trained researchers and become more widespread, there is a good chance that they will become bungled."

Enter the Hastings Center. "It was important to act quickly," Callahan explains, "because states were passing laws, the government was spending money, and innocent people were getting hurt."

After considering the moral implications of genetic screening, the genetics research group published guidelines in the prestigious *New England Journal of Medicine* recommending that mass genetic screening—for sickle cell as well as for other conditions—be voluntary, confidential and have back-up services and counseling. Several states adopted the Hastings Center guidelines, and others modified their screening requirements.

After this result, the genetics research group tackled the issue of prenatal diagnosis. The need for guidelines arises from recent advances in fetal examination techniques. Doctors can test the amniotic fluid and maternal blood serum, both of which have biochemical traces of fetal life, and they can look directly into the womb and see the growing fetus with a fetoscope. Information is often obtained about the fetus so that the parents can choose to have a selective abortion if defects are detected.

None of these techniques is without technical problems, and all of them present moral, social and legal dilemmas. One woman, for example, found out that she was carrying a set of twins: one was normal, the other had Down's syndrome. Should she abort the twins, the normal as well as the abnormal? She chose to deliver the babies. One was born healthy, the other died a few months later of causes associated with Down's syndrome. This woman had made her own choice.

Do society and the courts have a right to impose legal restrictions on such women? When the Hastings group took up this question, their feelings, according to Tabitha Powledge, were by no means unanimous. Nevertheless the group proposed guidelines, to be published in the *New England Journal*, affirming the right of parents to make such decisions.

How does the center deal with these seemingly unanswerable questions? To begin with, an issue is not discussed passively. It is argued passionately—and often at great length—during communal lunches around the library table, in book-lined offices, in the kitchen, on the lawn and at wine and cheese parties after working hours.

Ethicist Robert Veatch is the Hastings expert on issues of death and dying.

The ethics of psychiatrists

At a typical conference, subtitled "The Psychiatrist as Double Agent," 15 ethicists wrestled with the dilemma that psychiatrists face when, for example, they work for military institutions, prisons or mental hospitals. In making determinations as to whether a person is fit for combat or fit to be released from prison, should the psychiatrist's allegiance be to the patient or to the institution?

For the three days of the conference, words and ideas flowed. One conferee suggested that a psychiatrist should inform patients of his divided loyalties by giving them "a *Miranda* warning at the very outset," namely, "anything you say may be used to send you back to the front lines . . . or keep you in prison."

Another proposed that "prisoners should be given Medicaid and allowed to seek whatever medical help or psychiatric help that they want outside the institution." Physicians from the outside "might have a conflict . . . but there would be lines drawn so that it is clear that they are not in the warden's pocket or the parole board's."

A member of the group created a scenario in which a patient announced to

THE JENA® TEAPOT

Tea with Award-Winning Glass Artistry. Recognized by the Museum of Modern Art and The Corning Museum of Glass. Heat resistant and non-porous. 1.2 qt. capacity. Includes insert for tea and lid, plus our price list of fine teas and coffees. $25 plus $1.50 for handling. Prompt delivery. Send check or money order to

The Mug Shop
Dept. S19, Kennebunkport
Maine 04046 (207) 967-5956
Master Charge, VISA, Am. Ex.
Include card number and exp. date
Maine residents add 5% sales tax.

The Mug Shop
Kennebunkport, Me.

Luangwa Valley/Kafue National Park
CAMERA SAFARIS

Game viewing by Land Rover and on foot through Africa's fabulous game sanctuaries in Zambia and Botswana.

Zambia Airways
One Rockefeller Plaza
New York, N.Y. 10020

COVERED WAGON VACATIONS

There's a cry for the worthwhile, the beautiful, the different, the enriching, the truly memorable. Here it is: Ten 4-day/3-night trips on authentic wagon train. Nine covered wagons on trail by day; up to 30 for night circle. Stagecoach, horseback, campfires, fine food, fine crew, varied scenery on 55 miles of historic Smoky Hill Trail. Deluxe, easy, yet authentic experience for families and single adults from all over the world. EVERYTHING FURNISHED. Repeat rate proves its worth. For color brochure or reservations:

WAGONS HO, INC.
(913) 754-3347 / Box SM14 / Quinter, KS 67752

West End Shop

$39.

Cane & Wood Coffee Tables.

Form and function meet beautifully in this highly versatile designer piece. The finest Singapore cane inserts. Solid tropical hardwood in superb hand-rubbed, natural or light brown finish. $39 plus $6 shipping. 36" x 18", 16" high. Satisfaction guaranteed. Send check or charge VISA-MC (include exp. date, please) or call us for prompt service.

P.O. Box 3216, 632 S. Peters St.
New Orleans, La. 70177, (504) 945-6650.

Scholars Sydney Callahan (left) and Marilyn Weltz talk at informal gathering.

a physician that he had set a series of fires and planned to set another one. Should the physician be "societally oriented" and intervene by notifying the authorities? Or should he be "patient-oriented" and simply give the arsonist another appointment?

Predictably, the question produced disagreement. One conferee argued that "radical nonintervention is the direction . . . we should take in our own ethics and values."

Gaylin saw things differently. He felt failure to intervene would not be patient-oriented at all, in that it would not serve the patient's best interests. Gaylin compared the scenario to a case in which an upset patient "tells me that as soon as she leaves my office she is going to kill herself. By this standard, my shaking her hand and saying 'See you later' is being patient-oriented . . . ultrapatient-oriented would be to offer her pills with which to do the job."

And so it went. While this conference did not produce many conclusions, it stimulated hard thinking about issues in which, in Gaylin's words, "there is a conflict between two goods, so that whatever move you make you are in moral pain."

The community at Hastings revolves around a handful of associates trained in philosophy, theology and medicine. In addition, there is the staff of the *Hastings Center Report*, which publishes articles about the organization's intellectual probings, a group of student interns—and a handful of postdoctoral scholars who arrive each fall. There are also 90

GOLDEN RULE NO. 2.

To begin protecting your future, it's better to be a year too early than a day too late.

True, there were advance signs foretelling the Crash of '29 and the double-digit inflation-recession of '73.

But they happened seemingly overnight. Millions of people were caught unaware. And it was too late for them to protect themselves.

The uncertain future demands well-thought-out strategic investments and the sooner the better.

For many people, such an investment is gold and silver.

They believe gold and silver will again live up to their reputation as an effective protection against inflation, recession, depression and the declining value of paper money.

Naturally, not every investor achieves his goals. But wouldn't it be to your advantage to find out the traditional benefits of *gold and silver* to help you plan an economic strategy for the future?

Send for our free Investor's Guide to Gold & Silver. Now.

CALL 800-327-5587
(In Florida: 800-432-5579)
OR SEND US THE COUPON NOW.

International Precious Metals Corp.
P.O. Box 24400, 6451 N. Federal Hwy.
Ft. Lauderdale, FL 33307

I agree that time can be of the essence when it comes to forming a strategy to seek profit and protection. Send me your free Investor's Guide fast.

Name _____
Address _____
City _____
State _____ Zip _____
Phone (Bus) _____
Phone (Home) _____

____ I currently own an investment portfolio.
____ I have a current investment in precious metals.
____ I'm interested in owning precious metals.

Gold & Silver. The educated risk.

IPMC

Persons should be aware that the gold and silver markets are subject to daily and long-term fluctuations as economic factors change. IPMC is registered with the Commodity Futures Trading Commission.

SM1-79

QUESTAR 700

Called by Modern Photography "the best" the Questar 700 is unique in bringing to the telephoto market a lens that guarantees theoretical optical perfection and flatness of field from edge to edge, with only ½ of 1% linear distortion. Precise focusing from infinity down to 10 feet is accomplished with a single turn of the focusing ring, and at the 10-foot distance the image magnification is 1:4, an unheard-of ratio in telephoto lenses. Only Questar can deliver such performance. With its standard screw-thread T-mount adapter system, the Questar 700 can be connected to virtually every 35 mm SLR camera. Write for our literature: Questar Corporation, Box N 700, New Hope, PA 18938.

Specifications

Number of Elements	4
Focal Length	700 mm.
Aperture Range	f 8
Clear Aperture	88.9 mm.
Minimum Focusing Distance	10 feet
Angle of Acceptance	3° 25′
Length	8 inches
Diameter	4⅜ inches
Weight	4 pounds
Filter Provisions	35 mm.

non-resident fellows chosen for their expertise in a wide range of disciplines. This group includes theologian Paul Ramsey; lawyers Paul Freund, Harold Green and Jay Katz; geneticists Kurt Hirschhorn and Robert Murray; government health-policy administrators Gerald Klerman and Ruth Hanft; ethicists LeRoy Walters and James Childress; and a longtime supporter of the center's work, Vice President Walter Mondale.

When does death occur?

Most of the research is done by working groups of 12 to 15 fellows, who come from various points around the country to spend a weekend at Hastings every few months. One such group has focused on death and dying. Modern medical technology has made it possible to keep bodily organs operating indefinitely even when the brain itself has lost the capacity to control those functions. At what point, then, is a person dead—at the time of "brain death" or not until all bodily functions cease? The conclusion was that brain death is the proper criterion to follow. "Some physicians," says Robert Veatch (p. 111), senior associate at Hastings, "very likely changed their behavior as a result of our statement."

Two members of the research group have proposed a model law which would establish that death shall be pronounced when there has been irreversible cessation of brain function. Several states have modified their statutory definition of death to conform in varying degrees with the center's model.

When the courts in New Jersey were trying to decide the now famous case of Karen Ann Quinlan, the 21-year-old woman who went into a coma after supposedly mixing alcohol and drugs, attorneys for both sides of the case sought help from Hastings. Originally, most of the parties involved were confused between two issues—the definition of death and the right to die.

The center's conclusion made it clear that Karen was not suffering from brain death. Her brain had lost its cognitive capabilities—those that make it possible to talk, think, see and feel—but it still had the capacities to maintain the biological aspects of life such as regulation of blood pressure and swallowing. She was not, by any proposed definition, dead. But the group decided in favor of her right to die.

Is Your Pattern Here?

We have hundreds of old, active, and discontinued Sterling Patterns. We may have your Pattern on hand, or can locate it, at a tremendous savings to you.

NEW · ANTIQUE
ESTATE SILVER & PEWTER
(DISCOUNTED)
WE BUY SILVER
GEORGETOWN

Silver Shoppe

Dept. SMI · 1261 Wisc. Ave NW
Washington, D.C. 20007 (202) 337-0011

SCROLLS Hand Lettered

Scrolls & Certificates for Appreciations, Retirements and other Awards
Call or write for free brochure.

AMES & ROLLINSON, INC.
215 Park Ave So., Dept. S1, N.Y.C. 10003 • 473-7000

Russian Lacquer Boxes

For assistance with your collection, please send for our full color brochure.

Light Opera
Ghirardelli Square #102
San Francisco, California 94109
(415) 775-7665

A Cultural Expedition

Easter Is.

Explore this legendary microcosm of civilization with an archeologist lecturer/escort. Photograph gigantic stone statues, temples, petroglyphs. Write for detailed itinerary. 15 and 23 days

Society Expeditions

Dept. SM Box 5088, University Station, Seattle, WA 98105

Name

Street

City/State/Zip

Expeditions also to: ☐ New Guinea ☐ Antarctica ☐ Patagonia ☐ Galapagos Is. ☐ Mongolia

University of California Extension, Berkeley

Study Abroad

Unique opportunities for adults, summer 1979

- ☐ **Oxford**—24 courses in many disciplines
- ☐ **Paris**—great literary figures
- ☐ **Leningrad**—art, history & literature
- ☐ **Switzerland**—alpine botany & ecology
- ☐ **Greece**—civilization during the Bronze Age
- ☐ **Sea of Cortez**—island & sea ecology
- ☐ **Rome/Florence/Venice**—art history

Courses one to four weeks long. Academic credit optional.

Send this coupon with name and address to:
Public Information, Dept. H-33, UC Extension, 2223 Fulton St., Berkeley, CA 94720.

Beauty

The ALERION CLASS SLOOP is an exquisite mahogany-epoxy reproduction of N. G. Herreshoff's personal boat, ALERION III. Sail her a lifetime, then give her to your children.

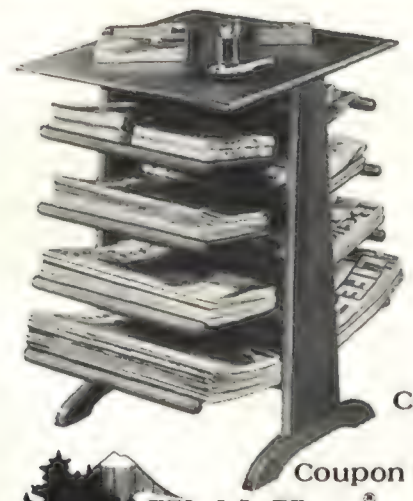
26ft. 6100 lbs. wood, lead, canvas & bronze. Illustrated booklet: $2.00

SANFORD BOAT COMPANY, INC.
LOWER PLEASANT ST., NANTUCKET, MASS. 02554

Sea-Fari® *into Nature*

Voyage down the coast of Mexico and journey to remote islands. Explore the hidden worlds of whales, sea lions and exotic birds in their wilderness habitat.

For more info., write or call
H & M Landing
2803 Emerson St. San Diego
CA 222-1144



Send For Your FREE Catalog. Fill Out Coupon Below

Yield House®
Dept. S91A, Box 1000
N. Conway, N.H. 03860

MAGAZINE END TABLE
has space for over 100 issues on 8 shelves. Pine & hardwood, 23"H 18"W 21"D.
Easy Kit $21.95.
Finished Antique $31.95.
Add $4 post. ea.

Name_____
Address_____
City_____
State_____ Zip_____

Based in part on the analysis and documentation provided by the research group at Hastings, the New Jersey Supreme Court ruled that Karen's parents could request cessation of life-sustaining technology.

When the center was founded ten years ago, it dealt primarily with the ethical problems faced by individual practitioners. Should a doctor attempt, for example, to resuscitate an 87-year-old stroke victim who has already been paralyzed by a previous stroke? "Physicians wanted us to be specific about what to do in cases like this," says Callahan.

Now, though, the center is moving beyond individual dilemmas to matters of policy that must be confronted by the government and the public at large. For example, does freedom of choice include the freedom to use a drug like laetrile, which has not been scientifically proved safe or efficacious? Should health costs be controlled by limiting access to health care? "As a society," says Callahan, "we all should be deciding."

The recommendations will not be easy, but as medical technology advances, the need to make them will become more urgent. "The whole field just continues to explode," Callahan says. "And we are caught right in the middle of it."

Center atmosphere is relaxed, and local youths come to play in estate's trees.

As women make their way up the employment ladder, are they emulating men—or bringing with them special feminine resources?

In answering this question—and others—The Christian Science Monitor gave readers a new insight into the women's movement and where it's going.

It's not unusual for Monitor writer Charlotte Saikowski to take an area often examined by the press and find unnoticed new dimensions. Dimensions that really set us thinking. As Chief Editorial Writer of this daily world newspaper, she's continually searching for—and sharing—fresh perspectives on world situations. Her editorials and those of her staff reveal the hopeful elements in the grimmest situations. They seek to show whatever constructive action is possible.

Find out for yourself what it's like to read editorials like these plus outstanding news reporting and analysis. Try an introductory 13-week subscription to the daily Monitor. It costs just $12.50 and the Monitor will send you a FREE reprint of the Saikowski series "Women Today." Be sure to mention the Smithsonian when you ask for your reprint. Simply call toll free 800-225-7090 (in Mass., call collect 617-262-2300). Or write The Christian Science Monitor, Box 125, Astor Station, Boston, MA, U.S.A. 02123.

THE CHRISTIAN SCIENCE MONITOR®

T4G-Smith

Now You Can Collect Rare U.S. Stamps

You are invited to enjoy building a rare U.S. stamp collection. Become a subscriber in the Rare U.S. Stamp Investments Club.

Rare U.S. stamp investments are liquid. The ever-increasing demand for quality United States stamps has created a seller's market.

During the last 10 to 20 years, rare U.S. stamp values have been spiraling up at rates which may be unbelievable to conventional stock market investors. During the past two years alone, U.S. stamp values have achieved an average annual compounded growth rate of 15.5%

These impressive increases in value are the result of a rapidly increasing demand by professional stamp collectors and investors for the absolutely fixed supply of existing rare U.S. stamps. The supply of U.S. stamps produced in the 19th and early 20th centuries can never be increased. As today's 27 million stamp collectors become more affluent and as thousands of new collectors join their ranks each year, competition for the higher quality stamps of the past will only serve to drive their prices even higher.

Rare U.S. Stamp investments are completely private. A large investment in rare stamps can be stored safely in a small place - like an album or safe deposit box. No one ever needs to know you are investing in stamps or how much your investment is worth. Our member's names are held strictly confidential.

Now, our professional new service makes investing in rare U.S. stamps simple. You can participate with confidence in the rapidly rising values of rare U.S. stamps. For as little as $20 per month, FNI will help you build a rare stamp investment portfolio on a regular monthly basis. As a subscriber to Rare U.S. Stamp Investments, you are given the opportunity to capitalize on the experience and know-how of our stamp experts.

Build a complete collection of America's greatest stamps chosen by distinguished advisors. Join this unique Club today!

To learn more about this exciting new opportunity, write today to:

Rare Stamps
Box 2557 SM 7
McAllen, Texas 78501

Rare Stamps SM 7
Box 2557, McAllen, Tx 78501

Please send complete information on Rare U.S. Stamp Investments plan.

NAME_____

STREET_____

CITY_____

STATE_____ ZIP_____

Book reviews

Tallgrass Prairie: The Inland Sea
Patricia D. Duncan
(The Lowell Press, $20)

When my grandfather moved west from Vermont almost a century ago, he must have seen much of the original tallgrass prairie as he traveled through Indiana, Illinois, Wisconsin, Iowa and finally to western Minnesota, where he became a homesteader.

He saw the prairie only as fertile farmland, a place to build a home and put down family roots. And that's the way the prairie went. What was once 250 million acres, or 400,000 square miles, of open land running through the center of America from lower Manitoba to Texas, has been reduced by 99 percent. What was once home for 80 species of mammals, 300 species of birds, and thousands of insects has been mostly plowed, planted, grazed, built on and paved over.

Patricia D. Duncan, co-founder of the Tallgrass Prairie Foundation, wants to preserve at least a part of the remaining one percent as a national park. She tells why and how it can be done in the story of her personal romance with an ugly duckling land, *Tallgrass Prairie*.

How do you get stirred by, much less fall in love with, what is largely a table-flat, treeless, grassy piece of real estate? It may have to be an acquired taste. Mrs. Duncan herself confesses that "I had always thought of the American prairie as an unexciting, large chunk of empty space—an underdog landscape."

About ten years ago, having moved to Kansas, she began to "see the landscape" and the prairie gradually became a consuming part of her life. Now, she writes, "In reality there is no man-made theatrical event, no written drama, no opera, no symphony that compares with the sights, sounds, smells and *feel* of the open prairie. It is the real thing."

Mrs. Duncan's story is of her five-year, 30,000-mile journey through prairie country, sprinkled with the skirmishes and battles of a small band of preservationists who are trying to keep a portion of it alive for the rest of us.

What we lose if the tallgrass prairie should vanish is an ancient land that has learned to withstand disease, frost, high winds, drought, fire and severe heat. Scientists have determined that it is "close to being the most complex, and yet the most balanced, ecosystem on earth."

Coyote in tallgrass of Konza Prairie, once home of Konza, Kansas or Kaw Indians.

A superb photographer, Mrs. Duncan's 100 photographs go beyond the "look-see," from a grasshopper perched on a wildflower to a raging prairie fire (some of her prairie pictures appeared in SMITHSONIAN, July 1975).

Preservationists have been fighting for the establishment of a tallgrass prairie national park for more than two decades. Opposition has come mainly from landowners, farmers and ranchers who see it as a threat to their homes and livelihoods. An important round is coming up and the environmentalists have been hard at work neutralizing the antipark contingent. Representative Larry Winn jr. of Kansas has introduced a bill that would establish the Tallgrass Prairie National Park and Preserve on 300 square miles of Kansas grassland. There are attractive provisions for owners of the land. As for progress on this legislation, there's a good chance that Congressional hearings will be scheduled for the early part of 1979. Let us hope that Americans yet to come will not have to rely solely on books to experience this cultural and ecological legacy.

—Thomas W. Kelly
Washington free-lance writer

Bonaparte
Correlli Barnett
(Hill and Wang, $19.95)

With the finely honed tools he has perfected as a military historian Correlli Barnett examines the Napoleonic legend in his new book, *Bonaparte*. He is not the first to do so. For more than a century and a half, most of the literate world has examined and debated the career of the Emperor of the French, the Eagle, reformer of political and social structures, voraciously aggressive general and flamboyant Corsican opportunist. Unfailingly partisan, they have labeled Napoleon as either the Savior or the Scourge of France. Barnett chooses the latter.

Bonaparte is more than Napoleon's life story, a fact suggested by the prologue account of the future emperor's first military effort to seize the Citadel of Ajaccio during the French Revolution. There in 1792, claims the author, was set in miniature the pattern of his future political and military strategies. And in forceful prose Barnett pivots his work on that revolutionary action in Corsica.

While the biography moves from

s.s. Rotterdam departs January 9, 1980.

1980's Extraordinary World Cruise: to the South Pacific, Africa, South America, and the Caribbean!

Come spend 100 of the sunniest, most memorable days of your life! Cruise in luxury to 25 exciting ports, including 16 new destinations for 1980.

Around the World to: Cartagena, Cristobal & Balboa, Acapulco, Los Angeles, Honolulu, Papeete, Mooréa, Suva, Madang, Manila, Hong Kong, Singapore, Colombo, Bombay, Seychelles, Mombasa, Zanzibar, Durban, Cape Town, Montevideo (also for Buenos Aires), Rio de Janeiro, Salvador de Bahia, Barbados, Havana.

Escape from Winter to those warm, friendly far corners of the world only Holland America knows so well. There's so much to see, and you'll see it all, on that most gracious of world cruise ships: the magnificent s.s. Rotterdam. Enjoy days and nights of Continental courtesy, charm, and cuisine...with superb entertainment. We sail West into the sun from New York, January 9; from Port Everglades, January 11; from Los Angeles, January 23.

See your travel agent or mail in the coupon below. s.s. Rotterdam: Netherlands Antilles registry.

Holland America Cruises 79W1-79
2 Penn Plaza. New York. N.Y. 10001
Tell me more about your 1980 World Cruise.

Name_____
Street_____
City_____ State_____ Zip_____
My travel agent is_____

Holland America
22nd World Cruise

You've probably never worn more comfortable boxers!

They're knitted, not woven, from 100% cotton to fit and feel better.

Norm Thompson boxer shorts feature: ■ Cotton that has been mercerized to strengthen the fabric and give it a soft, silky texture. ■ A full-cut style. ■ Double stitched seams for durability. ■ A heat resistant elastic waistband. ■ Tapered side vents bound in red material. ■ Machine washable, dryable and wrinkle resistant. **Color:** White with red trim. Men's even sizes: 28-46. Save $1 . . . 3 prs./$14 ppd. Save $3 . . . 6 prs./$27 ppd. Or $5 ppd. per pair.

Men's T-shirt available in the same fabric. Even sizes 34-48. **$5 ppd.**

"ESCAPE from the ordinary."

Norm Thompson

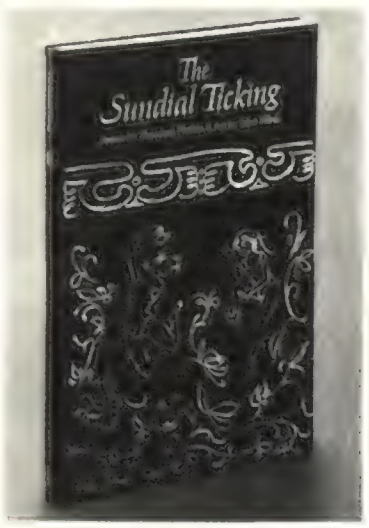
Dept. 02-70
P.O. Box 3999
Portland, OR 97208

Order TOLL FREE anytime 1-800-547-1160
(Excluding Oregon, Hawaii, and Alaska)

Boxer shorts No. 460F	Qty:	Size:
T-shirt No. 465F	Qty:	Size:

☐ Ck. ☐ VISA ☐ Master Charge ☐ Am. Exp.
Total amount of purchase: _____
Card #_____ Exp. date_____
M. C. Intbk. #_____ Sig. X_____
Name_____
Address_____
City_____ State_____ Zip_____
☐ Send FREE "Escape from the ordinary®" ctlg.

A PUBLISHING TRIUMPH



The Sundial Ticking

Poems by Theodore Plotkin
Art by Edna Hibel

Elegant First Edition art and poetry book autographed by author and artist.
Brilliant color. 18" x 12". 88pp.
First Edition: $250.
Deluxe First Edition: $1050.
(w/2 original lithographs)

For the name of your dealer, write:
JAR Publishers, P.O. Box 9967,
Riviera Beach, FL 33404. Dept. D

Enlisted by brother Napoleon to help rule Grand Empire: (from left) Jérôme of Westphalia; Lucien of Canino; the Emperor; Louis of Holland; Joseph of Spain.

Napoleon's birth in 1769 to his death in 1821, the reader participates in a march from the stalemate of Ajaccio through the desolation of Waterloo. Shortage of supplies, disregard of manpower realities, swift surprise maneuvers, duplicity in negotiation, and reporting defeat as victory: these characteristics are recalled repeatedly on an ever-increasing scale through the book, until they serve as a muffled drumbeat of human destruction resulting in Napoleon's ultimate defeat. Bonaparte's battles are analyzed, with maps included to help.

But *Bonaparte* surpasses mere recitation of military tactics. Barnett describes June 24, 1812, when French troops first set foot in Russia during the fateful Moscow campaign, as a day "for sweating wet inside serge and braid, fur and steel and brass." He carefully spaces the insertion of vignettes of the Emperor's personal life to elucidate the portrait of an ego-dominated leader. For example, on their coronation day in 1804, "Bonaparte and Josephine set out for Notre Dame, but in the best traditions of a Bonapartian march, two hours late." He lingers over Napoleon's fantasies concerning the invasion of England, but deals briskly with explosive imperial reactions to people and events like the Spanish uprising in 1808, when Napoleon was "like a beehive vigorously prodded with a stick, orders swarming out of him in all directions."

The better to chisel his subject, Barnett depicts a triple personality: the brilliant mathematician, strategist of Austerlitz; the actor-romantic of triumphal marches and republican galas; and the fiery Corsican of the Duc d'Enghien's massacre. The Emperor's idiosyncrasies are not ignored (he was horrified by open doors). But above all, according to Barnett, the French leader, "engorged with power," was devoted to "making Europe fit for his ego to live in."

This biography is effective, for Barnett's style is compact, energetic and colorful, and his subject is clearly fleshed. The notes and bibliography are extensive, but arranged to enhance, not disturb, readability. Some may question the author's grasp of the French psyche, or the bias that, as a British subject, he carries into his conclusions concerning a giant of French history. Barnett emphasizes that Bonaparte was ever a Corsican and despotism overrides nationality.

Regardless of partisan feeling, *Bonaparte* is to be praised for its martial execution and its elegance. Superb examples of Napoleonic iconography embellish almost every page. Indeed, all those who revel in toy soldiers, strategy games, history, myth perusal or plain good reading will delight in this newest biography of Napoleon, Emperor of the French.

—Betty-Bright P. Low
Historian of Franco-American culture

Send for our 48 page full-color "Catalogue & Price Guide of Collectors' Paperweights" $3.

Antique & Contemporary

Paperweights

L. H. Selman, Ltd. paperweight specialists
761 Chestnut St., Suite 14C, Santa Cruz CA, 95060

DAYTRIPS in EUROPE

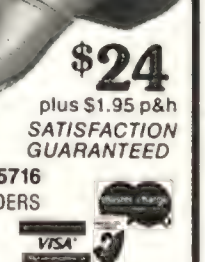
Wonderful ideas for your next European adventure! Designed for people who like to get around on their own, our unique travel guides show you how to explore fascinating places on foot. For *FREE* information please write:

GREAT TRIPS, box 5199-S new york, ny 10017

Wood/Craft Catalog
with 20 wood samples

2000 PRODUCTS

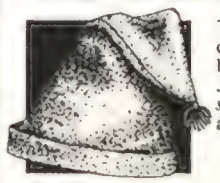
Finest veneers, woods, tools, period hdwe. Plans, how-to books, picture molding. Everything to help you Build, Restore, Refinish. (est. 1812)



Catalog and samples $1
Dollar refunded on 1st order
Catalog without samples 50c

CONSTANTINE
2067 Eastchester Road, Bronx, N.Y. 10461

The Traditional Nightcap



The red cotton flannel classic in luxurious double layers to really keep you warm in bed. *(Physiologists have measured that 30% of body heat is lost through the scalp!)* **Home-made and hand-finished;** adjustable for snug fit. **$7.95 ppd.**

Putnam Antiques
6 Pond Rd., Middlefield, Mass. 01243

CONTROL 1979 EXPENSES

48 page Personal Financial Record. Simplified double entry system with illustrated instructions. Includes budget form, monthly record sheets, annual summary page and tax preparation form. Only $3.00 (+6% tax in CA). THOMAS & THOMAS, Box 1135K (3462 Squier Ln.) Placerville, CA 95667.

OLD PUEBLO TRADERS *since 1946*

LADIES CAVALIER PANT BOOTS

KRAUS *Originals* "like wearing gloves on your feet"

Handsomely crafted in **GENUINE GLOVE LEATHER.** Smooth, no-seam vamp; adj. buckle strap. Resilient ribbed sole and 1" heel. **CARAMEL, BROWN, BLACK.** Comb. sizes: 6-10½N, 5-10½M & W.

FREE CATALOG with order

$24 plus $1.95 p&h

SATISFACTION GUARANTEED

OLD PUEBLO TRADERS
Dept. SM1CV
600 S. Country Club, Tucson, AZ 85716
OR CALL 602-795-1281 FOR CHARGE ORDERS
(No collect calls, please)
ENCLOSE $1 FOR FASHION CATALOGUE (refundable with first purchase)

VISA

Like Normal People
Robert Meyers
(McGraw-Hill, $9.95)

Robert Meyers, a reporter for the *Washington Post*, with this book has made the difficult decision to "go public" with the painful, inevitably self-revealing account of how he and his family coped with the immutable fact of his younger brother's mental retardation.

In telling his story Meyers ran into resistance at first from his editors, who worried about his family, about whether such reporting could be accurate or complete, and about the potential for adverse consequences from cranks. Meyers also had to win the confidence not only of his brother but of his brother's brand-new bride, of the parents involved and, not least, of himself in answering, candidly and authentically, the painful questions as to how it was and is.

Despite all these obstacles, he succeeded—and the result is this poignant, clearly enunciated portrayal of Roger Meyers (age 30, learning-disabled, a poet and long-time restaurant busboy) and his girl friend Virginia Rae Hensler (age 27, impaired by a forceps accident at birth, articulate, indomitable). Throughout the book, too, is a solid helping of up-to-date information on the slow but impressive transformation of society's view of the retarded—from that of outcast toward that of person and citizen.

There are memorable scenes: Roger and Virginia's wedding day in a California church, with enthusiastic promptings by the bridegroom during the clergyman's benediction; Roger's terrible boyhood nightmares, derived, his mother believes, from desperate striving to catch up with his peers; Virginia's girlhood sojourn in a residential facility, from which she once hurled her leg brace in a fit of frustration ("It didn't break anything because the window was open"); the Meyers family's tensions over their backward member (father's repressed rage, mother's secret drinking, the author's feeling of entrapment in the role of his brother's keeper); Roger's and Virginia's hard-won mastering of some of the fundamental intricacies of modern life and Roger's triumphant maturing on the job.

Today Roger and Virginia are living in an apartment of their own, with the help of publicly paid subsidies and personal counseling services that did not exist only

Treasure From the Deep
Pieces of Eight

Lost at sea over 260 years ago

Yes, these are authentic treasure coins — the legendary Pieces of Eight, recovered from a 10-ship Spanish Treasure Fleet which was wrecked on July 31, 1715 by a fearsome hurricane off the Florida Coast.

Real Sunken Treasure

Each solid silver coin was hand struck over 260 years ago, thus *no two are alike*. Sea worn, yet each is distinguished by the Spanish crest on one side; at least two arms of the Cross on the reverse.

Now an Exquisite Pendant

We've added a 22" sterling silver chain to transform this truly rare treasure coin into a most exceptional gift for him, for her, for you. The **4-Reale Piece of Eight,** (#1002) hand-mounted in a sterling silver bezel frame (shown above actual size): $195 The **1-Reale Piece of Eight** (#1003) with 16" chain: $75

1-reale coin

Sale of these coins has been authorized by the State of Florida, Division of Archives, History and Records Management. We have selected the very best from those recovered, and your pendant comes with our Certificate of Authenticity and history. Please add $1.50 postage per pendant. 14 day guaranty of satisfaction.

World Treasure Society
Division of
International Coins & Currency Inc.
1106 School Street, Box 218
Montpelier, Vermont 05602

Phone orders: 802/229-0394

Master Charge/VISA/American Express charges include card no. and expiration date with order

Write for our new Catalog of Real Treasures from the Past

a decade ago. Though busy and productive, their future remains precarious and dependent on their continuing acceptance by society.

It is not clear whether they will have children or if the supportive social services needed will always be available.

As a parent of a 21-year-old younger son very like Roger, I am grateful that Robert Meyers made his revelatory leap. His well-wrought and moving work will bring new understanding to those who have little personal acquaintanceship with, in Virginia's term, the "slow-minded" of this world. For me, passages such as this are sure to linger:

"One evening in Baltimore, someone who did not know my family asked what my brother did. I started to reply that he is retarded. Suddenly it struck me for the first time in the twenty-eight years of our lives together that mental slowness is not the sum of his existence. He is a man who is married, holds down a job, pays taxes and writes poetry. I hope I will never forget that moment: I was in my car, driving down a dark street in Baltimore, and I'd been asked what my brother does. I replied that he is in the restaurant business."

—*Robert Stearns*
Montgomery County President, Maryland Association for Retarded Citizens

The Visitors' Book: A Family Album
Christopher Simon Sykes
(Putnam's, $25)

You have to admit it was a great stroke of whimsy, even in those halcyon days—England in the 1860s. Here was Christopher Sykes, MP for the Yorkshire village of Beverley and confidant of the Prince of Wales, dressed to the nines in full 15th-century armor. He and the Prince's party are in a carriage on their way to a costume ball in a tony London district.

To avoid attracting a crowd, the Prince orders the driver to go round to the tradesman's entrance. The passengers descend—Sykes oh-so-gingerly—and the cab is dismissed. A knock on the door. When the servants come, the others dart in, and the Prince slams and bolts the heavy timbers, leaving Christopher helpless and humbled in his brightwork. The agonizing walk around the grand palazzo to the front door becomes a gauntlet of jeers as the curious gather to trace his progress. In a twinkling, knight is transformed into clanking tinman.

Life was like that for Christopher Sykes. He was born to be the butt of countless upper-class jokes—a younger brother. Since the onset of primogeniture, society has always had a problem with younger brothers of great landowners. In the Middle Ages, they made them all knights and sent them off to fight the Saracens. By the Victorian era, knighthood had long been out of flower, as Sykes and the street-people knew.

Christopher Sykes was the younger brother of Sir Tatton Sykes, owner of Sledmere, a 36,000-acre estate in the East Riding of Yorkshire. The family sent Christopher off to Parliament, where he sat for 27 years. During all that time, he championed only one bill—for the preservation of sea birds. For his pains, he became known as "the gulls' friend," and opened his palatial Hill Street home in London and his Jacobean manor house, Brantingham Thorpe, to the great and

The Holmes Stereoscope

Invented in 1859 by Oliver Wendell Holmes, our **hand-crafted Stereoscope** is a handsome reproduction of his famous instrument.

It is superbly made of **solid wood,** with a rich walnut finish. All fittings are **solid brass** and a silk screened design embellishes the velvet-edged, brass hood. The Holmes Stereoscope makes a decorative addition to any home.

This Victorian Masterpiece is your window on the past. You, your family and guests will enjoy **62 lifelike 3-D pictures** taken between 1859 and 1920. See gold miners on the Chilkoot Pass, Times Square in 1859, visit the Paris World's Fair, see the Cardif Giant, the San Francisco earthquake, Buffalo Bill, peek at Victorian risque, and **MUCH, MUCH MORE!**

You may use additional views which you may find in dusty attics, cellars and antique shops.

The optional pedestal display base has a spun brass pedestal, a wood base with a felt bottom and a museum-type brass plate which says:

The Holmes Stereoscope
Invented 1859
by Oliver Wendell Holmes

A full supply of the Holmes Stereoscopes - the most popular form of instrument - with the improvements which have been added by Mr. Bates the manufacturer, will always be for sale at wholesale and at retail.

These Stereoscopes, originally suggested by Dr. Oliver Wendell Holmes, and highly recommended by him, are unequalled for seeing Stereoscopic Pictures to the best advantage. The shade for the eyes excludes all external and surrounding light, and the sliding rest allows an adjustment to any focal distance required, by near or far sighted persons.

(Circa 1868)

24 HOUR SERVICE –
for Master Chg, Visa/Bank Amer., or C.O.D.
CALL NOW, TOLL FREE—800-824-7888
Ask for Operator No. 7-S01
In California — 800-852-7777
In Alaska and Hawaii — 800-233-7919

OR: Fill out this coupon and send it with your check, money order, or Master Charge or Visa/Bank Americard account number.

YOU LOVE IT OR YOUR MONEY BACK!

STEREO CLASSICS STUDIOS
145 Algonquin Parkway
Whippany, New Jersey 07981

☐ In your stereoscope set you get: 1. The hand-crafted Stereoscope, 2. 62 old-time 3-D views, and 3. The booklet, "The Story of the Stereoscope", **ALL FOR $19.95** plus $1.50 postage and handling. $

☐ The optional pedestal display base is only $6.95.

☐ P.S. If you already have a stereoscope, the 62 views and the booklet alone are only $6.95 plus $1.00 postage and handling.

NO RISK!
YOU LOVE IT
OR YOUR MONEY BACK!

Sub-total
Sales tax, where applicable
TOTAL $

☐ Payment enclosed Charge my: ☐ Master Charge ☐ Visa/Bank Americard

Name _____ Acct. No. _____

Address _____

City _____ State _____ Zip _____ Exp. Date _____

Signature (required for charge card orders) _____

"Dancing Marquis," a disastrous in-law, squandered wealth on jewels, theatricals.

near great. The Prince of Wales and his entourage always stayed at Brantingham when the Doncaster races were in season. But it was not to be forever. Eventually Christopher ran out of some necessities: money and youth.

This book is a family tribute to five generations of Sykeses, written by a great-great-grandson. Because it is based on family diaries, mementos and under-stairs folklore, it is also a time capsule of Victorian and Edwardian life. Its 200 photographs make it a living, breathing footnote to the tales told by Trollope and Galsworthy. The resigned pictures of Christopher—seemingly aware that he was no longer society's darling even as the party was still going on—are alone worth the price of admission.

The father of Christopher and Sir Tatton was a great landowner of the East Riding. His drive and dedication transformed the Yorkshire Wolds into an endless series of productive farms. He is credited with discovering the agricultural benefits of bone meal because he was alert to how green the grass grew by his bone-gnawing foxhounds.

Sir Tatton wished to become known as a force in the Gothic Revival and so rebuilt and restored more than 15 churches, expending today's equivalent of a million and a half pounds in the effort.

This was a world of giant potted palms, decorated screens and marble statuary—beautiful things all around. It was also great houses, great halls and great staffs to do the dusting. On the personal side, the Sykeses' successes were grand: Westminister Abbey marriages, the winner's circle at Ascot and the Derby, friendships with royalty, the Rothschilds and Lily Langtry. And the defeats were just as noisy: the loss of some great estates, a scandalous trial involving Sir Tatton and his wife Jessica, a disastrous fire at Sledmere, and the last days of Christopher, an upper-class dependent and rotating house-guest to the end.

The Sykeses earned their share of disappointment and dashed hopes. But their only eccentricity, as Tolstoy noted about families in general, was that they contrived to be unhappy in their own way.

—Michael Olmert
Free-lance writer and critic

Now you can travel with Rand McNally

EUROPE
13 itineraries featuring the Mediterranean

MIDDLE EAST
4 itineraries featuring Egypt, Israel

- deluxe and first-class hotels
- outstanding international cuisine
- professional escorts
- complete sightseeing

For more information, contact your travel agent or send in the coupon below.

Rand McNally Vacations / Dept. S1
P.O. Box 6539 / Chicago, Illinois 60680

Yes! Send me more information

☐ Mediterranean Europe Vacations ☐ Middle East Vacations

Name Address

City/State/Zip

Phone My Travel Agent is

Every Rand McNally Vacation is created, operated and backed by Rand McNally & Company—the most respected name in travel. Since 1856.

SMITHSONIAN SUBSCRIBER SERVICE

In order to:

- Change your address
- Inquire about . . .
  - *The status of your membership-subscription*
  - *Dues payments*
  - *Gifts*
- Report missing issues or membership cards
- Correspond about related matters

Please write to our computer data center where all these records are maintained and processed:

SMITHSONIAN
MEMBERSHIP-SUBSCRIPTION DATA CENTER
P.O. BOX 2955 BOULDER, COLORADO 80322 TELEPHONE (303) 442-2261

TO CHANGE YOUR ADDRESS—

Send us an address label from a recent issue together with your new address, or fill in the information below. Please give us 6 weeks advance notice.

NAME _____ (Please Print)
OLD ADDRESS _____
CITY _____
STATE _____ ZIP _____

NEW ADDRESS _____
CITY _____
STATE _____ ZIP _____

The Oriental— Walk With A Sense Of History.

This collector's edition walking stick displays traditional Oriental symbols. Now it can be yours—personalized with your own engraved Old English initial. The 12-ounce sculpted handle is cast of solid, highly-polished bronze. The shaft is balanced, hand-turned Northern ash, complete with rubber-tipped solid brass finial.

$75.00 each. Texas residents add 5% sales tax ($3.75). Allow three weeks for delivery. Mail check or money order. Or send Master Charge, VISA, or American Express account no. and expiration date to: **Stonehouse, P.O. Box 3784A, Austin, Texas 78764. Phone (512)444-0295. Enclose your name and address. Indicate initial for handle.**

AUTHENTIC 39" TOBACCO BARN THERMOMETER

A new authentic reproduction of a rare touch of Americana, 39" x 8", decorative, functional, indoor/outdoor wall hanging. Sturdy metal in blue enamel with yellow, red, and white trim.

An ideal gift. Satisfaction guaranteed.

EACH **$16.95** (postage paid) check or money order

The Great Americana Store
Dept. A C P.O. Box 98
Great Neck, New York 11021

FREE 4-color 18" x 24" 50-year old barn sign poster with each order.

SEA EAGLE®

A tough little performer: Our SE-IV

At 12 lbs., a boat you can pack. At $64. a boat you can afford.

Just one of many quality inflatable boats.
Send 50¢ for full-color catalog:

LEISURE IMPORTS
Dept. SS179, St. James, N.Y. 11780 • 516-724-8900

Additional reading

Grévy's zebra (p. 34)

Horses, Asses and Zebras in the Wild by Colin P. Groves, David & Charles (London), 1974

A Natural History of Zebras by Dorcas MacClintock, Charles Scribner's Sons, 1976

Wild Cousins of the Horse by Alice L. Hopf, G. P. Putnam's Sons, 1977

A Guide to Kenya and Northern Tanzania by David Horrobin, Charles Scribner's Sons, 1972

Berenson (p. 46)

Forty Years with Berenson by Nicky Mariano, Alfred A. Knopf, 1966

Sketch for a Self-Portrait by Bernard Berenson, Pantheon Books, 1949

Duveen by S. N. Behrman, Random House, 1951

Self-Portrait with Donors by John Walker, Atlantic-Little, Brown, 1974

Another Part of the Wood and *The Other Half* by Kenneth Clark, Harper and Row, 1974 and 1978

Roger Stevens (p. 56)

"Closings and Openings" (two parts) by E. J. Kahn jr., *The New Yorker*, February 13 and 20, 1954

"A Low-Key Gambler with a Hot Hand in a High-Stakes Town" by Tom Zito, *Washington Post*, January 25, 1976

Life Among the Playwrights by John F. Wharton, Quadrangle, 1974

The Lively Years: 1920-1973 by Brooks Atkinson and Albert Hirschfeld, Association Press, 1973

Cities (p. 66)

Design of Cities by Edmund N. Bacon,

SMITHSONIAN INDEXES

Yearly indexes for Volumes III, IV, VI, and VII (April 1972-March 1975 and April 1976-March 1977) are available at $1 per copy. (Volumes I, II, and V are out of print.) Please send requests to:

SMITHSONIAN Magazine
900 Jefferson Drive S.W.
Washington, D.C. 20560

ESKIMO ART QUARTERLY

Alaska, Canada, Greenland, Siberia: Arctic news; collector aids, prices; archaeo.-ethno. finds; reviews of exhibits, collections, current, classic biblio.; travel, symposia. **ARTS & CULTURE OF THE NORTH, Dept. C, 162 E. 80, N.Y.C. 10021**

Smithsonian Binders

Magazines slip into case to become valuable reference volumes. Dark blue with gold lettering. One file holds 12 issues.

THE HIGHSMITH CO., INC.
Box 25s
Fort Atkinson, Wis. 53538

One Smithsonian File, $4.29
3 or more, $3.71 each. All postpaid.

2-DRAWER FILE, 26¾"H 15½"W 19"D. Easy Kit $59.95 Finished $89.95 Add $9 postage each.

Fill Out Coupon For FREE Catalog

Yield House®
Dept. S91B, Box 1000
N. Conway, N.H. 03860

OUR FILES ARE BEAUTIFUL! Now you can have a professional file for your home or office in solid pine. 3-DRAWER FILE, 38"H15½"W19"D. Easy Kit $99.95. Finished $139.95. Both Shp. Incl.

Name_____
Address_____
City_____
State_____ Zip_____

Thames and Hudson, Ltd. (London), revised 1974

The Future of the City by Peter Wolf, Whitney Library of Design, an imprint of Watson-Guptill Publications, 1974

Neighborhood Reinvestment: A Citizen's Compendium for Programs and Strategies, The National Center for Urban Ethnic Affairs, 1977

Cities, a series of articles from *Scientific American,* Alfred A. Knopf, 1965

Pests (p. 78)

The Least Is Best Pesticide Strategy: A Guide to Putting Integrated Pest Management Into Action, edited by Jerome Goldstein, JG Press (Emmaus, Pennsylvania), 1978

The Pesticide Conspiracy by Robert van den Bosch, Doubleday, 1978

Insect Control in the People's Republic of China by the National Academy of Sciences' Committee on Scholarly Communication with the People's Republic of China (Washington, D.C.), Pub. No. 02525-7, 1977

"Of Mites and Men" by William Tucker, *Harper's* (Vol. 251, No. 1539), August 1978

Winston-Salem (p. 95)

The Southeast Seven, II, Southeastern Center for Contemporary Art, Winston-Salem, North Carolina, 1978

"Secca: Fine Art in Tobacco Town" by Ted Potter, *Contemporary Art Southeast* (Atlanta, Georgia), October/November 1977

Lunar nomenclature (p. 96)

The Moon Book by Bevan M. French, Penguin Books, 1977

The Moon by Patrick Moore and H. P. Wilkins, Faber and Faber, Ltd. (London), 1955

Bioethics (p. 107)

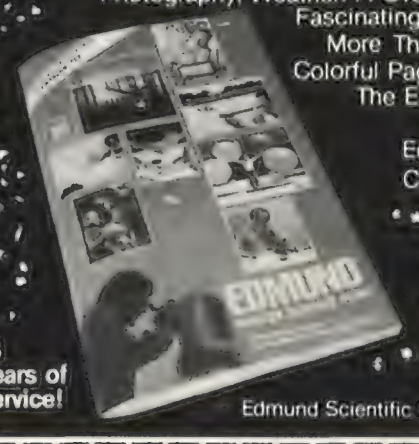
The Encyclopedia of Bioethics edited by Warren T. Reich, Free Press (New York), 1978

The Hastings Center Report, the Institute of Society, Ethics and the Life Sciences, published monthly, Hastings-On-Hudson, New York

"The Hastings Center: Think Before You Act" by Dava Sobel, *The Rockefeller Foundation Illustrated,* September 1978

FREE! EDMUND SCIENTIFIC CATALOG

Explore Astronomy, Biofeedback, Computers, Health, Lasers, Magnets, Microscopes, Optics, Photography, Weather. . . Over 4,000 Fascinating Items. More Than 160 Colorful Pages . . . The Exciting, FREE Edmund Catalog!



38 Years of Service!

No. 108
Edmund Scientific Co. 1979

☐ **Yes! Rush me your FREE Catalog so that I can explore Edmund's World of Science.**

Name_____
Address_____
City_____
State_____ Zip_____

Clip and Mail Coupon Today to:
Edmund Scientific Co., KS02
Edscorp Bldg., Barrington, N.J. 08007

NEW "MEMORY BOOK!"

Showcases up to 200 photos—and a showpiece in itself, with unique cover that opens like a double door! Inside, four tiers of flip-up clear pockets—photos are easy to see, safe from dust and fingerprints. No glue, no mess, slip them out any time to re-arrange. Padded leather-look cover has gold tooling, gleamy metal latch, lifetime solid brass initials. American-made by famed Holson, a luxe gift! 11½x11½x1½", holds photos up to 3½x5".

2332 In Antique Brown $15.98
2333 In Antique White $15.98

Add $1.50 post. & hdlg. NY res. add taxes. Master Charge or Visa: send account number, exp. date, Master Charge Interbank number.

LILLIAN VERNON®
Dept. T14, 510 S. Fulton Ave.
Mt. Vernon, NY 10550

On a 23-day Air-India tour, we'll show you white tigers, take you riding on an elephant, and show you the seven cities that are all called Delhi. Now that's a little bit different.

No one knows India better than Air-India. No one can take you there better. We've got lots of tours of India, too. All kinds. They've all got one thing in common: Air-India's expertise. Which means they run smoothly and you stay comfortable. And you see things most other tours can't show you. See your travel agent or send us the coupon.

Air-India, 400 Park Avenue, N.Y. 10022
Send me India tour information.
S91

Name

Address

City, State, Zip

Travel Agent

A little bit different. A little bit better.

AIR-INDIA TO INDIA

Toll-Free numbers: Continental U.S. 800-223-7776;
N.Y. State: 800-223-8115;
in New York City: 212-751-6200

Smithsonian highlights

January special events

For those thrilled by frozen lakes and ponds this month but cursed with spaghetti-limp ankles, there's an exhibit at the Museum of History and Technology called "The American Skating Mania." In the 1860s, it seems, the national winter-sports craze was ice-skating. Never before had so many American women skated, not to mention after sundown. One reason for this dramatic turning point was the skating clubs, which lured Victorian city dwellers with romantic music, gas lamps and refreshments. Then, as now, the trick was to look graceful and stylish—without falling on your derrière.

Arts and Industries Building
"Discover Puppets!" (202-381-5395)—Susan Linn (here through January 7); Lovelace Theatre (January 10-28); Washington Dance Theatre (January 31-February 11).

Cooper-Hewitt Museum (New York)
"The Dream King—Ludwig II of Bavaria" (January 23-March 25)—Designs, drawings and photographs of interiors and castles created to satisfy a royal building mania.

Freer Gallery of Art
"The Artistic Interrelations between India and the Near East" (January 9, 8:30 P.M.)—Dr. Richard Ettinghausen, former Freer curator, is lecturer.

Hirshhorn Museum & Sculpture Garden
"Richard Estes: The Urban Landscape" (January 25-April 1)—A one-man show of a cityscape artist in the tradition, if not the style, of Canaletto and Hopper.

Museum of History and Technology
"Selections from the Chase Manhattan Money Collection" (opens mid-January)—Exhibit includes 370 different kinds of currency and coins.

Museum of Natural History
"Where Eagles Soar: Behavioral Development of a Golden Eagle" (January 15, 5:45 P.M.)—A trip to the Wyoming prairie with Dr. George Blau, bird psychologist and photographer. Baird Auditorium.

National Air and Space Museum
- "Exploring the Planets"—Newest of 23 galleries has full-scale *Voyager* replica.
- Second Annual Wernher von Braun Memorial Lecture (January 31, 8 P.M.)—"Reflections on von Braun and the Saturn-Apollo Team" by Dr. Rocco A. Petrone.

Winter, a Winslow Homer wood engraving from *Harper's Weekly,* 1868

In the superrealistic vein of Richard Estes: *Diner,* 1971

National Collection of Fine Arts
"Collages by Irwin Kremen" (January 26-March 25)—This N.C. artist (p. 88) finds raw material for his intimately scaled works on European kiosks, walls.

Musical Weekend in May

The Eighth Annual Musical Weekend, sponsored by the Smithsonian's Division of Musical Instruments and the Friends of Music, is scheduled for May 4-6. Hotel accommodations for two nights and all meals are included. For further details and reservations write: Musical Weekend, Room 4123, Museum of History and Technology, Washington, D.C. 20560.

Smithsonian Division of Performing Arts (202-381-5395)

• "Alberta Hunter" (January 7, 8 P.M.)—This grand old lady of the blues, now 83, is still going strong. Baird Auditorium.
• "Smithsonian Chamber Players" (January 7, 8, 8 P.M.)—History and Technology's Hall of Musical Instruments.
• "McCoy Tyner" (January 14, 8 P.M.)—Pianist for the late John Coltrane carries on, extends the great sax player's innovations. Baird Auditorium.
• "Egypt Dances" (January 25, 8 P.M.)—Magda Saleh's film of 17 traditional folk dances with live commentary by the Egyptian dancer herself. Baird Auditorium.
• "Madga Saleh" (January 26, 8 P.M.)—Miss Saleh presents slide lecture, then performs modern dances. Walter Terry provides commentary. Baird Auditorium.
• "Vaudeville!" (January 27, 28, 8 P.M.)—Multi-act salutes to the Keith/Orpheum circuit. Baird Auditorium.

Upon Arrival at the Smithsonian

Members are invited to register—between 10 A.M. and 4 P.M. daily—with the Associates' receptionist in the Smithsonian castle on the Mall. Here orientation materials are available; membership cards can be replaced (upon showing your SMITHSONIAN address label); and the Associates Lounge, a restful oasis, is located.

The Court
The Associates' own restaurant in the Museum of Natural History—membership cards required, buffet style: lunch weekdays, 11 A.M.-3 P.M.; breakfast weekends, 8:30 A.M.-11 A.M. (use Constitution Avenue Entrance); and brunch weekends, 11 A.M.-3 P.M.

Museum Hours
All museums open 10 A.M. to 5:30 P.M. daily; National Zoo: 9 A.M.-4:30 P.M.

Parking
Free parking—a very limited amount—is available on Madison and Jefferson Drives along the Mall. Air and Space Museum underground garage (7th St., S.W., just north of Independence Ave.): 7 A.M.-6:30 P.M. weekdays; 9:30 A.M.-6:30 P.M. weekends, holidays (75 cents an hour for first three hours; then $1.10 an hour).

Radio Smithsonian

• "Henry Moore at 80" (week of January 7)—Full-scale look at work of noted British sculptor (SMITHSONIAN, August 1978)
• "Music Machines USA" (week of January 7)—Mechanical music makers, from barrel organs to music boxes and Edison.
• "The Wright Way to Fly" (week of January 14)—A celebration of the 75th anniversary of the historic first flight.
• "The Truth of Science Fiction" (week of January 14)—Reflections by Ray Bradbury, chronicler of the Martians *et al.*
• "America on the Seas" (week of January 21)—The saga of the U.S.' growth as an important seagoing nation.
• "A Woman's Place is in the Lab" (week of January 21)—Little-known but important accomplishments of 19th-century women scientists in America.
• "Archie Bunker at the Smithsonian" (week of January 28)—Norman Lear talks about TV impact of *All in the Family.*
• "The Art of Satire" (week of January 21)—The disturbing work of George Grosz, German satirist between the wars.

Smithsonian Institution Traveling Exhibition Service

SITES circulates exhibitions to hundreds of cities throughout the United States. To sponsor a show in your community, write to Eileen Harakal, SITES, Smithsonian Institution, Washington, D.C. 20560. Here are some January openings:
• Phoenix, Arizona (January 13-February 11)—"Adam and Eve: Their Portrayal," Phoenix Art Museum.
• San Bernardino, California (January 20-February 18)—"Workers and Allies: Female Participation in the Trade Union Movement," California State College.
• Gainesville, Florida (January 13-February 25)—"Treasures of Cyprus," Santa Fe Community College.
• Thibodaux, Louisiana (January 13-February 11)—"The Art of Scientific Illustration," Nicholls State University.
• Kansas City, Missouri (January 20-February 18)—"Extra! Extra! The Men and Machines of American Journalism," General Services Administration.

Join with other Smithsonian Associates

Travel and Study, at Home, Abroad . . . and

For both the seasoned and would-be traveler, the Smithsonian has developed a travel program to meet a variety of tastes and budgets. In order to accommodate the increasing growth and interests of Smithsonian Associates, the tour programs have expanded, bringing travelers to places reflecting the Institution's interests.

Domestic Study Tours

Smithsonian Sampler Weekend—Tour of Smithsonian museums with curators and staff, including private viewing of gem collection. Four weekends planned in January, February and March.

Yosemite in Winter—January 26-February 4: Cross-country skiing and evening lectures on forest ecology, glaciology, astronomy and wildlife—under guidance of Yosemite Institute staff.

South Texas Wildlife—February 24-March 4: Follow winter bird migration to the Gulf and Rio Grande Valley and wildlife refuges of Aransas, Padre Island, Laguna Atascosa and Santa Ana.

Mississippi—April 19-26: The history and architecture of Jackson, Vicksburg and Natchez with local preservationists.

Big Bend—April 21-28: A nature tour of this Chihuahuan Desert wilderness park in southwest Texas.

History of the Federal City—May 16-20: Trace origins and development of nation's capital with visits to historic houses and districts, plus behind-the-scenes tour of Congress in session.

Chicago—May 24-28: Discover the architectural treasures of this vibrant city.

Magnificent Tetons—June 1-10: Hikes, field trips through the national park in cooperation with Teton Science School.

Connecticut Antiques—June 17-24: Visit museums, special collections, historic houses, private homes and noted antique dealers.

Coming in September—A week of traditional British and American folk dance and music at a rustic camp on Cape Cod.

Washington "Anytime" Weekend: Choose any weekend to visit original Smithsonian building, spend two nights at Loew's L'Enfant Plaza Hotel close to the Mall, and see other sights in city by Tourmobile. Reservations and payments must be received at least ten days prior to arrival.

Foreign Study Tours

Red Sea Passage—February 1-11, 1979: Sail from Suez on the *Argonaut,* visit Karnak, Luxor, Valley of the Kings and Abu Simbel in Egypt, Petra in Jordan. Stay at the Mena House Hotel next to the Pyramids for Sakkara and Memphis, the mosques, bazaars and Archaeological Museum of Cairo. *Subscribers may add one or both of the following two options:*
Jerusalem Prelude—January 25-February 2: Also visit Damascus, Baalbek, Basra and Jerash before boarding in Suez.
Tanzania Game Preserves Postlude—February 11-18: Fly from Cairo to Kilimanjaro, visit Arusha, Ngorongoro Crater, Serengeti and Lake Manyara. Return to the United States via London.

Himalayan Cultures—March 21-April 15: Delhi, Agra, Calcutta, Darjeeling, Nepal (including tigers and Everest viewing), and Bhutan for a five-day exploration.

Greek Islands Cruise—April 22-May 3: Sail on the chartered M/V *Neptune* with a limited number of Associates. Visit ancient sites on Aegean islands, circumnavigate the Peloponnesus, sail through the Corinth Canal and stay in Athens.

Copenhagen to Lisbon—August 17-September 3: Cruise on MTS *Argonaut;* transit the Kiel and North Sea canals; sail upstream on the Seine, Loire and Gironde rivers, with special visits to northern Spain and Portugal.

Foreign Charter Tours

Kenya, East Africa*—February 1-18, 1979: Wildlife and tribal life adventure providing modern insight—and the Africa that "used to be," in the old safari tradition. Seminars in Nairobi and in the field—Masai Mara; Samburu; Kilaguni.

The Bavaria of Ludwig II —April 9-23: The fantastic architecture created for Ludwig II, builder of the fairy-tale castle of Neuschwanstein and patron of Wagner. Sample Munich's museums and cultural life; travel through the Bavarian Alps and up the "Romantic Road" of Gothic towns and castles; visit Wagner's Bayreuth, center for music and culture.

The Wild Highlands of Scotland—May 3-19: In cooperation with Aigas Field Centre, based in Victorian castle, explore magical scenery of central Highland glens. Evening lectures provide background for special hikes and nature field study.

Paris and the French Countryside*—May 13-27: Museum lectures, walking tour of the islands of the Seine and excursions to Chartres and Malmaison plus a choice of a week-long travel seminar to Burgundy, Provence, or Normandy and Brittany.

Russia*—May 20-June 3: Leningrad, Tallinn and Moscow.

Trans-Siberian Express—June 4-26: Fly from Seattle to Tokyo for tour on steamer to Nahodka; train to Khabarovsk, Irkutsk and Lake Baikal; choice of travel seminars to Samarkand, cities of Old Russia, or Outer Mongolia and Gobi Desert.

Midsummer Night*—June 20-July 4: Tour begins in Rovaniemi, Finland, on Arctic Circle, ends in Helsinki. Celebrate year's longest day, travel through Lapland to mountains, fjords of northern Norway, go by coastal steamer to North Cape.

Scotland*—September 9-23: Edinburgh and beyond—a program of walking tours and special visits to castles, abbeys, battlefields and archaeological sites.

Oxford/Smithsonian Seminar—September 14-29: Select from unique curriculum taught by Oxford University faculty and live in Worcester College. Lectures, field trips and special seminars utilize rich resources of the town and university, the Ashmolean Museum and Bodleian Library.

Sultans' Treasures*—September 23-October 7: An adventure tour to Istanbul and Asiatic Turkey and a cruise on the Bosphorus. Separate excursions to Aegean Turkey, Anatolia or Cappadocia.

Spain*—September 30-October 14: Madrid and day excursions to Toledo or El Escorial. Week-long travel to the Basque country and Barcelona; Andalusia and Córdoba; Santiago de Compostela.

Low cost tours include first-class hotels, most meals, sightseeing, lectures, theater tickets, air fare. *Indicates optional predeparture course will be available.

Write Smithsonian Associates Travel Program, A&I 1278, Smithsonian Institution, Washington, D.C. 20560 or call (202) 381-5635.

in Washington

Selected Studies Seminars

A successful new program gets you behind-the-scenes for an inspiring week at the Smithsonian and other Washington museums and cultural facilities. Illustrated and on-site lectures by outstanding experts combine with specially arranged field trips to make these seminars a unique and memorable experience. Join us in:

Astronomy of the Ancients—March 25-30: Leading authorities and widely known writers who are attracting widespread attention in the rapidly growing field of archaeoastronomy discuss the intriguing discoveries and hot debates concerning ancient peoples' sophisticated knowledge of the sky. Illustrated lectures include monumental Stonehenge; the Egyptian pyramids; the temples, cities and other impressive stone alignments of the Mayans; the methods of the skillful Babylonians and the early American Indians.

French Impressionist Painting—April 1-6: Illustrated lectures and in-depth tours of the great works of Monet, Degas, Renoir, and other masters in the outstanding collection of the National Gallery of Art and the Phillips Collection.

Historic Horticulture—April 29-May 4: Lectures and a spring tour with each horticulturist or landscape superintendent of major 18th-20th century gardens including colonial Mount Vernon; the Victorian gardens of the Smithsonian; the lavish grounds of Hillwood, the former home of Marjorie Merriweather Post; the du Pont estates of Longwood and Winterthur Museum; and beautiful Dumbarton Oaks; as well as demonstrations by famous designers of historic floral arrangements (repeat of very popular program).

The Arts of Japan—May 20-25: Major artistic traditions of Japan including pottery; architecture of temples, shrines, palaces and imperial tumuli; painting and sculpture from prehistoric times to the present with particular emphasis on the impact of Shinto, Buddhism, China, Korea, and the West in the formation of Japanese taste. Illustrated lectures, films, museum tours of the outstanding collection of the Freer Gallery of Art, as well as special events focusing on Japan today.

Please send requests for full information on content, accommodations and fees by seminar title to: Selected Studies, A & I 1190, Smithsonian Institution, Washington, D.C. 20560 or telephone (202) 381-6434 for details.

Kentucky Straight Bourbon Whisky 86 or 100 Proof. Brown-Forman Distillers Corp. Louisville, Ky. © 1978

Your Nose Can Tell You A Lot About Great Wine.

And Great Whisky.

Even before your first sip of a Great Wine, you can tell it's a Great Wine. By its bouquet. Bouquet can reveal a wine's origin, class and condition.

Bouquet can also tell you a lot about a Great Whisky. Sniff Old Forester and you'll notice a marked smoothness of aroma. That's because Old Forester is a truly balanced whisky.

Balance means the whisky's bouquet retains neither the predominance of the barrel in which it was matured, nor of the grain from which it was distilled.

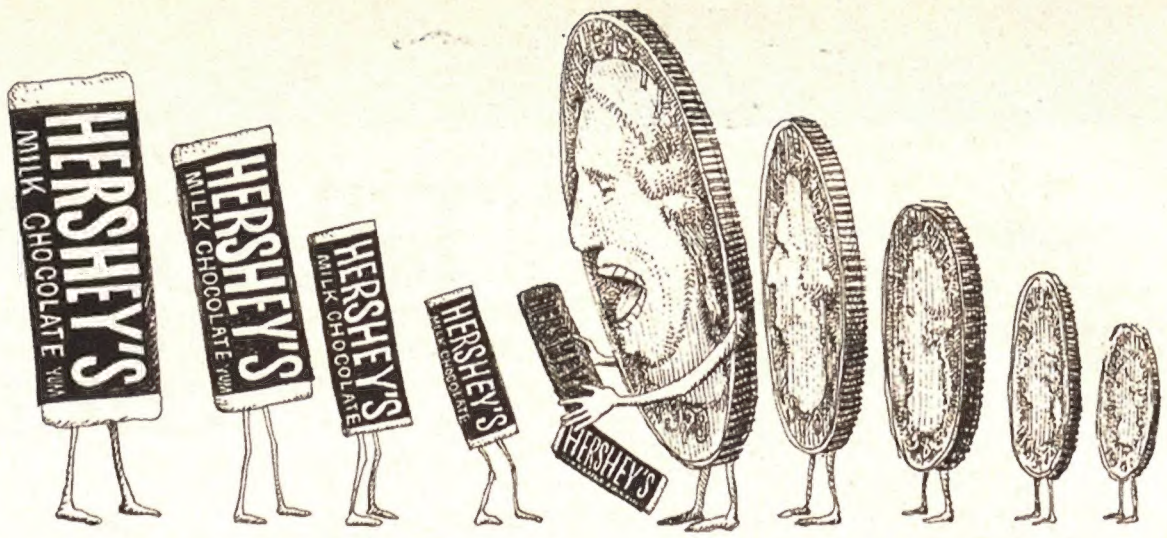
Old Forester achieves this balance through a unique process of maturation. In fact, it is the only whisky that is matured by totally controlling temperature and humidity.

The result of this costly method: a whisky of remarkably consistent balance, bouquet and flavor. One sniff will prove it. One taste will prove it even more enjoyably.

The Great Whisky Made Like Great Wine.

By Richard L. Williams

Shed a tear, and a quarter, for 5¢ bars



If the quarter is hungry enough, it will obtain some kind of bar.

If they haven't done so already, the kids must say good-bye any day now to the 20-cent candy bar, as must we all, and say hello to the 25-cent bar as one more fact of the ever upwardly mobile life. Short of giving up sweets, which a number of candy freaks do (temporarily) every time the price goes up, there isn't much the eater can do.

Before the kids' time, when the nickel was a more significant piece of change, we had about the same bars as today—the nutty or nutless Hershey, the Baby Ruth, the Oh! Henry, the Butterfinger, the Snickers, the Milky Way—all at five cents apiece. All much bigger then, too—three mouthfuls at least, a splendid sweet-tooth pacifier, as good a source of quick energy as any burst of adrenalin.

For only the 20th part of a dollar you could stave off hunger, satisfy the inner girl or boy and for a quarter's worth, five bars, even be a rich kid. The dentist, when you were taken to him, might cluck that your teeth were rotting but when opened wide, to let his instruments in, you could gesture toward your mother to indicate the fault was hers. After all, it was she or your father who gave you the allowance that made dental disaster possible.

All this was long ago: the nickel bar went out with the 1960s and at the start of the 1970s the standard price was a dime. So much for nostalgia. Now—*ta-DA!*—from the people who 56 years ago brought us Baby Ruth, comes Reggie. It is named for Reggie Jackson, the New York Yankees right fielder and it is boldly starting right out at a quarter. Two full ounces, no less—but still, that's two dollars a pound.

Reggie is only the second candy bar to be named for a ball player. The *Wall Street Journal,* which follows the fortunes of the candy trade with practically salivating fascination, has disclosed that the first one was *not* named for that other Yankee slugger, but bore the name of Ty Cobb. It didn't survive, and whether the Reggie outlasts Jackson's career only time will tell (Baby Ruth was named for President Cleveland's daughter).

Perhaps with some trepidation, the industry is going right along with Reggie, in price if not in weight. The industry started bracing itself months ago for this 25 percent change (20 cents to 25 cents) in the way things are. (To come closer to the Presidential guideline of seven percent, weights are going up too.) One can imagine some nervousness in the factories of Hershey, Pennsylvania, where new prices have been announced as the yummy smell of chocolate wafts for miles around and where even the streetlamps are shaped like foil-wrapped kisses.

Some trepidation would be only natural, consumer resistance being what it is. Nobody wants to price himself out of the market, and if the market is populated by millions of kids, nobody wants to be responsible for pushing up the cost.

If the children really want to know—and some will—who or what is pushing up the cost of candy bars, you can tell them it is the cocoa bean, and point them at the commodity-exchange reports in the financial pages. Back there most things go up and down, like the Dow Jones averages, but it's a long time since cocoa went anywhere but up.

An old-time candy man once doomsaid, "If cocoa ever goes to 15 cents a pound, we're out of business." But both he and the 15-cent level he feared are long gone. The other week "New York Cocoa," in the daily report of wheeling and dealing on the exchange, showed that the beans had gone to $1.80 a pound.

New York Cocoa doesn't usually get much space but it can be pregnant in meaning. At $1.80 the sweet commodity was higher than sugar, higher than coffee, higher than orange juice or cotton.

If the kids are still with you and want to know how come, the answer is a useful lesson in geography and intercontinental economics. Cocoa grows in countries within 30 or 40 degrees of the equator, like Brazil and West Africa. Brazil keeps having cold spells that hurt the crops of coffee beans and cocoa beans as well. The Ivory Coast keeps having droughts, and, besides, some African countries shoot at each other instead of tending the cocoa.

Not Ghana. You have the word of Dr. Edward Ayensu, the Smithsonian botanist who comes from there, for it: Ghanaian cocoa crops are tenderly tended and are worth it because the soil there, and the micronutrients therein, produce a superior cocoa bean that brings a superior price and is much used in blending with other ground beans to upgrade quality.

So the candy companies don't have much choice. They've tried synthetic cocoa, so far no good, and have tried shrinking sizes, but their "fun size" bar is no fun. If bars got much smaller they would be hardly bigger than vitamin pills, or cough drops which, by the way, also have gone to a quarter for reasons that can't be blamed on the cocoa bean. Bubble gum may not be far behind. Sorry, kids.

THE REMARKABLE THING ABOUT THIS BIG SCREEN TELEVISION IS ITS GE VIR COLOR SYSTEM.

In 1977, General Electric won an Emmy for being the first to use the broadcaster's VIR color signal in home television. This year, we bring you a revolutionary new big picture television with the incredible VIR color system built into it. We call it Widescreen 1000.

Like every GE VIR set, computer-like circuitry uses the broadcaster's VIR signal on many programs to automatically adjust flesh tones, background colors, blue skies and green grass. Giving you vivid lifelike colors. And all of this happens an incredible sixty times a second.

The Widescreen 1000 is a super-size TV with a picture three times as big as a 25" diagonal console. With all the advanced engineering found in GE sets. Including electronic tuning and the "chairside convenience" of random access remote control.

Call toll-free 800-447-4700 (in Ill. 800-322-4400) to find out where you can see the Widescreen 1000 and other GE VIR color TV sets.

vir

VIR

BROADCAST CONTROLLED COLOR

GE "Command Performance" VHS video cassette recorder optional.

Cabinet: Solid veneered wood.

This is GE Performance Television.

GENERAL ELECTRIC

RABBIT THE #1 SELLING CAR IN SWITZERLAND.

The Swiss are no cuckoos.

They sit surrounded by Germany, Italy and France – all of the biggest car makers in Europe.

Their choice of cars is unlimited. Yet the car they buy most is the Volkswagen Rabbit.

It seems fair to ask why.

To begin with, mountain climbing isn't just a hobby in Switzerland; it's the way everyone drives. Good weather or bad (especially bad) there is nothing like Rabbit's front-wheel drive to get a car up an Alp. Or a Rocky, or even a steep driveway.

Also, the Swiss worship precision; it's what makes them tick. Car and Driver described the Rabbit this way: "Quality is exceptionally high throughout, with solid slamming doors and a structure that feels as substantial as a Mosler safe."

The Swiss also dote on technology. Fuel injection, for example.

You might be as interested as the Swiss to know that you can't get a Renault with fuel injection. Or a Fiat. Or a Lancia. Not to mention Toyota, Honda, or Mazda. But you can get a fuel-injected Rabbit.

Last, but hardly least, is the fact that the Swiss are – well – frugal. And so when they see a car that's built like a vault, climbs like a goat, is far ahead of its time and still sells for a reasonable price, the Swiss do what sensible people everywhere do.

They buy them in droves.

VOLKSWAGEN DOES IT AGAIN

©VOLKSWAGEN OF AMERICA, INC.